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By O. O. BURGESS, M. D., President, San Francisco.

Ladies and Gentlemen, Members of the Medical Society of the State of California: We are assembled again—the twenty-second time in the history of this Society—for the various purposes of its organization. In the past these meetings have been productive of both pleasure and profit to all who took part in them ; and, although I have been denied the power to sway men by the gift of oratory, I am exceedingly anxious that the present meeting shall furnish no exception to the rule. I am confident that I shall meet with your hearty coöperation in the effort to secure this desired result.

Dr. A. W. Saxe.

But we are not all here. There are some of your members, I grieve to say, who will never again cheer our hearts by their presence, nor aid our deliberations by their wise counsel. Notable among these is one who, as an active and intelligent member and a most worthy President, commanded the admiration and respect of every one of us; and who, through a long, honorable and successful professional career, endeared himself by his rare and noble qualities of mind and heart to every one who had the pleasure of his acquaintance. Honored by his membership and profited by his work, this Society can ill afford to lose such members as the late Dr. A. W. Saxe, of Santa Clara.

Value of Medical Societies.

With the rapid advancement of medical science—due largely to the labor and experience of specialists in its various departments—the value and importance of society proceedings are becoming better and better appreciated and understood. In this connection it is gratifying to see how we, in this distant State, are keeping abreast of our more favored fellow-workers in and near the great medical centres of the East. Activity, intelligence, close observation and hard study are factors in our society work which are certain to make themselves felt, and which are sure elements of success.

Advertising.

They who contribute most of valuable material to society proceedings are contributing most to their own professional honor and success. They are advertising their knowledge and ability to the profession; and every medical man knows and feels the value of the respect and good will of his professional brethren. He who would rise above the common level must not only have the requisite ability, but he must make known that ability to the profession, and to the public as well. These are times when the world moves with startling rapidity. The slow methods of former years, when only now and then a name and a reputation came up out of the murky level of mediocrity, have given way to the active and aggressive methods of to-day, by means of which vastly increased numbers force their way up to justly achieved notoriety and distinction. Given the talent and the education, the rest is done by hard work and advertising.

They who teach in the schools and clinics; who operate before classes and on-lookers; who write valuable treatises and intelligent articles for the journals; who read practical or interesting papers before societies, and who take an active and intelligent part in the discussions which arise there—all these advertise themselves whether they will or no. Through those who hear and see these things, and much more largely through the reports of the medical press, their names, their sayings, and their doings, are sown broadcast throughout the profession. In this way comes rapid distinction and success to those of recognized talents and acquirements.

Then, again, the daily labors of the painstaking and conscientious practitioner, who is careful to do his best for every case that comes to him, are an advertisement of his worth, which is sure to bring him reputation and work. To advertise, to keep one's self before the public, is as necessary to the physician as to any other man—and these are legitimate methods by which it may be done.

But now come, pushing themselves into the accepted order of things, other methods of advertising, which address themselves directly to the public through the daily press. The remarkable eagerness for news developed in the modern public mind, and the astonishing enterprise, activity and ingenuity displayed by the press in supplying the demand, has created, among other things, a singular and insatiable craving for what may be characterized in a word as personality in journalism; and, amid the innumerable interviews, notices and contributions of persons notable or notorious, the medical man finds a place with rapidly increasing frequency. The omnipresent and eager news-gatherer finds grist for his mill in reports of injuries, surgical operations and interesting medical cases, and it is only natural that he should often include the names of professional men concerned in these reports.

As society was shocked at first by the publication of matters held sacred to the domestic circle, and the circle of tattlers immediately surrounding it, so was the dignity and ethical sense of the profession highly offended by personalities such as have just been referred to. But the times are changed. Society is now indignant if the press fails to herald its doings to the world, while the profession has reached a position of half tolerance, half protest, as regards the publication of matters personal to its members; provided, always, that they appear in a proper way and in connection with items of genuine public interest as news. Otherwise they become, simply, poorly masked advertisements, and are apt to return, like the boomerang, to destroy their instigators. The true origin of the code of ethics, written or unwritten, is in the conscience of honorable medical men. Now, conscience is not a fixed quantity, and may be greatly influenced by environment, education and habit of thought. But, although changes in public sentiment may modify the interpretation of codes and creeds, it can never so alter our unwritten code as to render it permissible for a medical man to advertise, in the usual acceptation of that term. But the time will come, if it be not already here, when the discussion of medical subjects and medical men by the daily press will excite no more unfavorable comment than the discussion of other men and other things. Already there is hardly an issue of the great dailies that does not contain from one to many items of medical news, and I believe the day not far distant when their reportorial staffs will each include a regularly qualified medical man, in order to insure the proper conduct of this department of news-gathering. There is a popular demand for medical news and medical knowledge, and it is to the best interests both of the profession and the people that this demand should be properly supplied.

Education of the public in legitimate medicine is its best protection against the deceptive wiles of quackery. And the public press is the great popular educator. But the benefits of the publication of medical news by the daily press are not always to the laity alone. They are often reaped by the profession, and in a very valuable form. Take, for example, the history of Koch's tuberculin. After the news of its discovery had been flashed all over the world, the members of our profession fairly held their breath with eagerness and anxiety to learn every possible detail concerning it. And rapidly as those details were evolved in the great centres of experiment, just so rapidly were they known to the profession in every quarter of the globe. The very rapidity with which the reputation of this discovery was driven through its experimental stages to its death was largely due to the compelling power of the press, that often finds a way of forcing events for which it is waiting.

I am aware that I am upon delicate and debatable ground. And, in order that there may be no misapprehension of the statements I have made, let me repeat, that in my view, it is not now and never will be proper for a physician to advertise—using the term in its ordinary sense—and that to give out or to procure the publication of items which are rather vehicles of personal puffery than matters of interest as news, is the worst form of advertising, because it is masked and underhanded. On the other hand, personalities relating to physicians are appearing and will continue to appear in various forms, and, although still under protest, the tendency of professional sentiment is rather toward toleration of them, under certain restrictions, than the opposite. Finally the publication of proper and reliable medical intelligence by the daily press is rather to be encouraged than condemned.

A Secretary of Public Health.

In no department of medical science have the labors of the profession been more promptly recognized and more thoroughly appreciated by the public than in that of preventive medicine. The disinterestedness of these labors is at once apparent, and their value is readily demonstrated by the results attained. So well, indeed, are their benefits understood that to-day the profession stands in an advisory, if not in an authoritative relation to nations, communities and individuals in all matters pertaining to the prevention of disease. In order to increase the efficiency of this work, and to render it more authoritative, there are two movements on foot to which I wish to call your attention. The first is now in the form of a bill introduced in Congress by Senator Harris, Chairman of the Committee on Epidemic Diseases, which provides for the establishment of a National Board of Health, to be under the control of the Treasury Department, and to consist of seven members; these members to be sanitary scientists, appointed by the President, by and with the consent of the Senate, and to receive salaries of five thousand dollars each. Three medical officers are to be detailed from the Army, Navy and Marine Hospital Service, respectively, and a legal member is to be assigned from the Department of Justice.

The second movement, and one to which I wish more especially to invite attention, first assumed definite form in a report by a special committee to the American Medical Association at its last meeting. The report ended by asking the adoption of the following resolution:

> *Resolved*, That the President of this Association appoint a committee to memorialize Congress, at its next session, on the subject of creating a Cabinet officer to be known as the Medical Secretary of Public Health.

This resolution was adopted and the committee was duly appointed. The report just referred to was a most able one, and presented very fully the reasons why such an office should be created, the duties that would pertain to it, and the benefits to be derived from it. Through the efforts of the committee then appointed by the American Medical

Association to petition Congress, a bill has been introduced in the House of Representatives by Hon. Mr. Caldwell, which embodies pretty fully all that the committee asked for. It is believed that this bill will eventually supercede that of Senator Harris, above referred to. I am informed that these movements are attracting a good deal of attention in high places. Indeed, my attention was first called more especially to this subject through the publication in the *Medical Record* of the following extract from a letter written recently by Secretary Noble to Dr. Starling Loving, of Columbus, Ohio:

"Individual effort," says the Secretary, "has done wonders in detecting the sources of danger to communities, and the discussion of such discoveries has interested every household. But, liberal as the medical profession is and has, in our country, proved itself at all times to be, it is not fair or polite for us to leave it unsupported and nationally unrecognized. The international communication of intelligence that would follow the organization of a Bureau of Public Health would not only preserve our own inhabitants from many physical ills, but would greatly serve to strengthen the sympathy between all civilized peoples, who would correspond and coöperate with us. They would feel the same beneficent influences of the system as we would realize."

These are brave words, and do credit alike to Secretary Noble's heart and head. The profession would be not only grateful for the recognition of its services, as proposed, but proud of the creation of a new goal of ambition for medical men in a Cabinet position as Secretary of Public Health.

In a letter just received by me from Dr. Loving, he says that Secretary Foster as well as Secretary Noble, Senator Sherman, and a large number of influential men outside the medical profession, are working for the bill, which leads to a feeling of some assurance that it may go through, although not without opposition from certain quarters. He adds that he has been informed the President favors the scheme; but how reliable that information may be he cannot say. I wrote to Dr. Loving that it seemed to me that if the State Medical Societies would each appoint a special committee to urge the subject of this bill upon their Senators and Representatives in Congress, it ought to be of material service to the movement. Dr. Loving strongly approved of this suggestion, and forwarded it to Dr. Comegys, of Cincinnati, who is chairman of the committee to memorialize Congress, and one of the most active promoters of the scheme.

I have referred to this subject somewhat at length, because I feel deeply interested in it; and I would suggest the appointment of a committee, or the reference of it to the Executive Committee, to give it consideration, and to report what action, if any, should be taken in the matter by this Society. The text of the Caldwell bill may be found in the Journal of the American Medical Association for April 2, 1892. Since writing the above, I have received a letter from Dr. Comegys, inclosing copies of the memorial, and urging us to adopt it, and communicate our approval to our Senators and Representatives without delay. The urgency of the matter rests in the fact that Senator Harris has stated that the Caldwell bill cannot be favorably reported by his committee (the Committee on Contagious Diseases, of which he is chairman), but that he intends to push his own bill, placing everything concerning public health under the charge of the Marine Hospital Service. The doctor's comment is that Harris is opposed to giving any rank or proper dignity to the medical profession.

National Law, Regulating Practice.

In this connection, permit me to refer to another subject, which has claimed considerable attention, and that is the need of a national law, regulating the practice of medicine. The principal object of such a law would be to secure uniformity of action throughout the States and territories. Indirectly it might be made to regulate the standard of medical education to a considerable extent, and thus secure greater uniformity in the curriculum of the schools. A national standard, as to the requirements necessary to a medical education, would possess many advantages. An especial advantage would be obtained by making it sufficiently high to command recognition of American diplomas in all other countries of the world. These are subjects worthy of profound consideration and of intelligent action.

Expert Witnesses.

Another matter deserving a word in passing, is the proposition to so regulate the function of expert medical witnesses, that they shall be simply explanatory and non-partisan, and also advisory to the Court. If medical experts were not permitted to take sides in a case, their testimony would better serve the ends of justice, and would reflect more credit upon themselves and the profession. It might not suit so well, however, the purposes of scheming lawyers.

The Pan-American Medical Congress.

I am requested by the Secretary General of the Pan American Medical Congress to call your attention to that movement. The constituent countries of the Congress include the West Indies and several islands of the Pacific, as well as most of the countries of North and South America. The first Congress will be held in the city of Washington, on the 5th, 6th, 7th and 8th of September, 1893. But it is required that contributors shall forward abstracts of their papers, not to exceed 600 words each, to the Secretary General, Dr. Charles A. L. Reed, of Cincinnati, Ohio, not later than July 10, 1893, in order that they may be translated into the various languages to be used, and published in advance, for the convenience of the Congress. The registration fee for residents of the United States will be $10. No fees will be charged to foreign members. Each member will be furnished with a set of the transactions. The organization of the Congress seems very elaborate and complete, there being no less than 21 distinct sections. I am pleased to note that our distinguished fellow-member and ex-President, Dr. L. C. Lane, has been honored with the representation of this State upon the Board of Trustees. If any action is required regarding the credentials of delegates to this Congress, it may be taken now or postponed until our next annual meeting. It is time, also, to begin to think of the next International Congress.

Our Committee of Arrangements admonishes us that brevity in our proceedings will be necessary to their completion. I will, therefore, set the example, and close with many thanks for your kind attention and indulgence.

ABSTRACT OF THE REPORT OF THE COMMITTEE ON CLINICAL MEDICINE

Of the Medical Society of the State of California, April, 1892.

By J. H. UTLEY, M. D., Chairman, Los Angeles.

The Diagnosis and Treatment of Incipient Phthisis.

The speaker prefaced his paper by stating that he had no new agent of marvelous power to detect and destroy the bacillus tuberculosis, but he believed it would be of interest to detail his experience with phthisis in its incipiency, because of the practical importance of the early recognition and treatment of this most fatal disease. He regarded the bacillus tuberculosis as the cause of phthisis, and divided the disease into two classes, the acute and chronic. In the acute form the progress was so rapid that we could seldom study it in the incipient stage, and it was of the chronic variety he wished to speak.

Diagnosis: Tuberculin would be of immense service in differential diagnosis, could it be relied on to produce the typical reaction in tubercular patients only; but unfortunately the characteristic symptoms have been observed to follow its use in healthy animals; and again, it has had no apparent effect on a few well marked phthisical cases. Besides, Virchow and other pathologists have found caseous pneumonia in so many autopsies of patients under tuberculin treatment that we are not justified in further experiment with it.

If the bacillus tuberculosis could be found in the sputum of all patients in the incipient stage of phthisis, a diagnosis would be easily made. Occasionally, however, sputum may be entirely absent, or be made up of saliva and mucus from the upper air passages. Sometimes so few are present in the profuse expectoration of an accompanying apical bronchitis, that they escape detection. He believed it was rarely the case, however, that a diagnosis could not be made from physical signs as early as from the discovery of the bacillus.

Generally, when you find bacilli, you also see yellow elastic fibres. Sometimes they are in abundance for weeks before the bacilli show themselves, and when the physical signs give no indication of a pulmonary cavity. While their diagnostic significance is not so valuable as that of the bacilli, they can be seen, with an ordinary low-power microscope, in sputum placed on the slide without previous preparation. The elastic fibres are also found in pulmonary abscess not tubercular, but other symptoms then make diagnosis easy.

The physical signs may be said to mark the different stages of phthisis, the incipient passing into the second stage, when consolidation is sufficient in extent to give distinct dulness on percussion and bronchial respiration. Very early in the disease we may find, on light percussion, that the pitch is raised when the intensity remains unaltered, or is slightly dull. This sign may be studied with advantage by placing the patient against a door or wall, which acts as a sounding board.

In auscultation, interference with the normal respiratory rhythm is certainly one of the earliest signs of phthisis. A shortened, prolonged or irregular inspiratory or expiratory sound is very suggestive when accompanied by bronchial rales limited to the apex of the lung. A harsh or feeble respiratory murmur restricted to a small area should at once arouse suspicion, and if accompanied with abnormal transmission of heart sounds some consolidation is present.

In palpating the chest, he had found some value in the suggestion of Trisling, viz.: the exercise of firm pressure in the intercostal spaces with the tips of the fingers. Considerable pain is experienced from this procedure over phthisical regions. A sign of greater importance is that of lack of resiliency in the diseased portion of lung, and it was a symptom which had not received the prominence he believed it deserved. Thompson and Fredericq had called attention to the presence of a sharply defined red line on the gums as one of the first symptoms of phthisis. He could not agree with them, having failed to find it in several cases, and believed it was due entirely to digestive disturbances.

Hemoptysis is often the first symptom of sufficient seriousness to attract attention to the patient's condition. While pulmonary hemorrhage occurred in many other pathological conditions, the expectoration of pure, or frothy, light red blood, generally comes from the lungs, and when the heart is sound is almost pathognomonic of phthisis.

Cough he no longer regarded as of value in diagnosis in the incipient stage. Judging from his own experience, it was frequently absent in cases without a catarrhal condition of the upper air passages. It was often a reflex symptom, and it was very difficult to appreciate when it was due to pulmonary lesions. He purposely omitted discussing other symptoms due to enfeebled digestion or to a disordered nervous system. We must depend on the examination of the sputum for bacilli and yellow, elastic fibres and the physical signs, with, perhaps, hemoptysis, for our diagnosis.

Treatment: A review of the therapeutics of phthisis, as presented in the various medical journals, since the discovery of the bacillus tuberculosis by Koch, is highly interesting. Bergeon's sulphuretted hydrogen, Weigert's inhalations of hot air, William's pneumatic cabinet for medicated vapors, Shurley and Gibbs' chloride of gold injections, inhalation of hydrofluoric acid, Liebreich's cantharidin, and, finally, Koch's tuberculin, have all been disappointing failures. The vitality of the bacillus is astonishing, as has been demonstrated by Koch and many others, by experiments on animals. Antiseptics powerful enough to cause the death of a tuberculous animal, have had no apparent effect on the bacillus.

He believed he had seen good results from the use of creasote in small doses, well diluted, in gastric indigestion, so often a disagreeable symptom in phthisis. It also sometimes modifies the severity of the cough, and the amount of expectoration, but he never had reason to think that it lessened the area of consolidation, or the number of the bacilli. It is best given in carbonated water, 1 to 2 minims, 4 to 6 times in 24 hours. When the patient was taking cod liver oil, he usually added it to an emulsion and found it useful in preventing the gaseous eructations so often due to the imperfect digestion of this remedy. He had found the pure beech wood creasote as well borne as guaiacol, but the latter can be given in large doses, and seems to have more of an effect in lessening the amount of expectoration. His opinion was that the less medicine a patient in the incipient stage of phthisis takes the better, and that the therapeutic measures adopted should be largely hygienic and climatic.

The influence of correct hygienic treatment cannot be overestimated. We should give exact and comprehensive directions to the patient, and see him often to assure ourselves that he is complying with them. If the patient was sent away on account of climate, we should endeavor to place him under the charge of a reliable man, or insist on frequent correspondence. He mentioned this because he believed we did not all realize the responsibilities we assume in dealing with these cases. The process of digestion being often imperfect, the diet should be carefully supervised. Milk should be drank in such quantities as can be assimilated, and by varying the form it can generally be made the most prominent article of diet. Meat, fruit, and vegetables should be allowed in moderation, of course, but as secondary to the milk diet.

No diet rules can be laid down to apply to all cases, but good judgment is required to be exercised in behalf of every patient.

Daily cold bathing must not be neglected, beginning at first with lukewarm sponge baths on arising in the morning, and gradually cooling the water each day till it is used at the temperature of 50° F., this after awhile being replaced by the tub bath, using the same precautions as at first. Gymnastic exercise and forcible breathing should be indulged in for the purpose of strengthening the respiratory muscles and expanding the air cells. Out of door exercise should be mild and free from excitement. Mountain climbing, horseback riding and athletic sports generally are to be avoided. Walking with erect posture and deliberate steps affords the best exercise. Clothing should be warm and light, and so made as not to restrict respiratory movements. The corset is responsible for many a case of phthisis, and he had seen suspenders so tight that chest expansion was seriously interfered with. A costume largely made up of wool, warm, light, and allowing free muscular action, was best.

The living rooms should be as sunshiny and as well ventilated as possible, and the bed-room should have an open fire-place, so that the temperature may be raised to about 65° F., when necessary. Prophylactic measures regarding expectoration must be insisted on, and a carbolic solution kept in the cuspidore in the rooms. A pocket spit-cup, like that made by Dettweiler, should be carried and used instead of handkerchief or expectorating on floor or street. The patient was in great danger of auto-infection, and must be impressed with this fact.

The climatic treatment of incipient cases was too broad a subject to be dealt with in the present paper. Prominent members of this Society had so forcibly presented the claims of the lower portion of the State as the ideal home for the consumptive, that little remained to be said. It seemed to him, however, that in praising the many excellent features of the climate of Southern California, some important facts had been overlooked, or not sufficiently appreciated. The climate of Los Angeles was not dry, for the mean relative humidity for five years is as follows: 1885, 71; 1886, 77; 1887, 77; 1888, 78; 1889, 72. This moisture comes largely from the ocean, for the rainy season is usually of brief duration, and the average rainfall is only 17 inches; but certain cases in which catarrhal symptoms are prominent do not improve in a humid atmosphere. They need the dry aseptic air of the desert or mountain, and had better be sent to Arizona or Colorado. The fogs are apt to be troublesome in spring, but on most days they pass away before noon. They often extend over the entire San Gabriel Valley, and reach an altitude on Mount Wilson of four to five thousand feet. They occur also during summer, especially after hot winds from the desert, which bring the temperature up to 100° F., or even higher. These hot desert winds do not come oftener than two or three times during the year, and may last several days, followed by a fog, which is refreshing and grateful to robust people, but rather distressing to the phthisical.

A study of the meteorological reports for a number of years past shows that the mean average humidity is about 7° greater in spring and summer than in autumn and winter. This increase of the moisture during the warm weather is due to vapor carried inland by ocean air currents flowing towards the desert. In Los Angeles, on a summer afternoon, when one faces the western breeze, the salt can be smelt and even tasted in the air, and may prove to be quite irritating to a congested larynx or bronchus. It is when the temperature is comparatively low—down in the forties, say—that a decidedly moist atmosphere is injurious, and it is during that portion of the year when temperature is lowest that soil—not atmospheric—moisture is relatively greatest On the foothills, about twenty-five miles from the Pacific, the soil is sandy, while about Los Angeles it is largely adobe. The water, too, near the mountains is pure, while that of Los Angeles is not. On these hills would be the proper place for the State to establish a sanitarium for cases of incipient phthisis. Such an institution would be of immense practical benefit, not alone to the inmates, but as a prophylactic measure. Branch establishments could be placed in the mountains at Banning or Newhall, or summer camps in the cañons, where the air is dryer and more rarified. Also, one for suitable cases on the seashore during the warm weather. How much better would be the prognosis of phthisis in the early stage of the disease, could patients, especially those with limited means, be properly cared for in a sanitarium, rather than left to shift for themselves, with everything against them.

All one can hope to accomplish by any method of treatment is to assist Nature to repair the diseased pulmonary structure, so that the bacilli can no longer develop there, and then to prevent the reintroduction of the germ into its old feeding ground.

ABSTRACT OF THE REPORT OF THE COMMITTEE ON SURGERY

Of the Medical Society of the State of California, April, 1892.

By W. LeMoyne Wills, M. D., Chairman, Los Angeles.

An Experimental Study in Pneumonectomy and Lung Suture.

The general acceptance of the "germ theory of disease" has, during the past decade, greatly stimulated investigation and research. To bacteriology is due the marvelous advances that have revolutionized surgery. The surgeon of to-day, with a thorough appreciation of the importance of asepsis and antisepsis, is no respecter of tissues, and has been enabled to relieve suffering and make life possible where in former years there was only hopelessness and death. Operations upon the peritoneal and cranial cavities having become an established procedure, the thoracic cavity next claimed the attention of the progressive surgeon. While the operation of thoracentesis is as old as Hippocrates, having in fact first been described by him for the relief of pulmonary abscess and empyema; thoracoplasty, pneumonotomy and pneumonectomy are essentially modern. Thoracoplasty, first suggested by Létrévant for the relief of empyema, was subsequently performed and described by Estlander. Pneumonotomy, for the relief of abscess, gangrene and cysts, has become an established operation, and, under strict antisepsis, has given good results. On the other hand, with the exception of the removal of small portions of lung tissue occurring as traumatic herniæ, or the extirpation of rare superficial tumors, pneumonectomy is essentially a new operation.

The speaker had found much difficulty in selecting a subject that would be suitable, and had finally determined to personally investigate the operation of pneumonectomy, and the present paper embodied the results he had obtained. He believed that within the next ten years pneumonectomy, from being a curiosity of the laboratory, would rank with other operations for the relief of conditions within the abdominal and cranial cavities. Before this was accomplished, however, much laborious research and experimentation on the lower animals would be necessary; but, with improved methods, this could now be done with a minimum of suffering. He had originally intended to experiment on various domestic animals, but finally decided to make use of rabbits only. These were selected from being more easily obtainable, and because they were more manageable in the laboratory; their low vitality also naturally diminished the chances of recovery after operation, so that in the event of recovery the experiments were more conclusive. Other investigators have used rabbits, notably Zakharevitch, who had only two fatalities in 13 operations. A committee of the Stillé Medcal Society of the Undergraduates, University of Pennsylvania had used dogs. In the first series of experiments all the animals died, from shock or later septic complications. In a second series of experiments the results were much better, and the committee considered that the same *technique* might be adopted in surgery, as none of the steps depended upon any anatomical peculiarity.

The speaker said if there was any claim to originality in his experiments it lay in the attempt to determine, by repeated operations on the same animal, the limits of surgical interference. He had followed the methods employed by Dr. Willard in experiments on dogs, and thought the difficulty alluded to by that operator in retaining dressings on the dog was more than offset by the greater strength of their lung tissue when contrasted with the friability of that in rabbits. The latter animals, from their excessive timidity, were very prone to die from shock, and this could be the only explanation of deaths that had taken place during his work without pathological changes to explain them.

The object of the experiments was to ascertain the following facts: (1) The ease or difficulty with which various operations may be carried out upon the chest and lungs of rabbits. (2) What part or parts, and how much lung can be removed with safety.

In rabbits, owing to the large size of the scapulæ and pectoral muscles, approach to the upper spaces is very difficult, especially as an incision through different layers is only to be made when the leg is drawn into an unusual position. When the rabbit is walking about, the wound, through tissues and muscles loosely attached to one another, is tortuous and apt to retain the products of wound healing. The lungs of an adult rabbit weighing 5 or 6 pounds, weigh from 2½ to 4 drachms, the right being considerably larger. There is great similarity in arrangement of parts between the rabbit and man, particularly in the anatomical relations of lungs, diaphragm, ribs, etc. The place of easiest operation is, for upper and middle lobes, close to sternum, in second or third space, and for lower lobes, third and fourth intercostal space, in front, or posteriorly, beneath scapula, in sixth or seventh space. Pneumonectomies can be done almost anywhere, but most easily opposite the root of the lung, from second to fourth interspace, as there the least respiratory traction will be met. The chief difficulty in operating is the delicacy and friability of the lung tissue and the maintenance of the proper degree of anesthesia. Where this was insufficient struggling ensued, when nerves were touched, and too much ether was either immediately fatal or necessitated resuscitation. Another difficulty is the impossibility of keeping the animal and parts operated upon in a state of rest.

The rabbit can live with one lung if that be uninjured, and can live, apparently, well with the lower lobe removed on one side, and that on the other rendered of little service by suturing to the chest wall. This subject might have been pushed, but for fear of going too far and losing some of the animals, when it was desired to have them live as long as possible after the operation. It is quite certain that the pleura is much more tolerant of interference than is usually supposed, and is quite as long suffering as the peritoneum. In but one case was there any spread of inflammation. After two or three weeks a wound of the pleura will be obliterated and hard to find.

The rabbit exhibits considerable resistance to sepsis. In the first operations the wounds were allowed to go too long without dressing, and discharges were retained, yet throughout the whole series, no matter what was the physical condition, there were never any evidences of constitutional sepsis. On account of the timidity of the animal no attempt was made to take the temperature. When well they ate and ran about freely; when ill they were very quiet. The only way to learn their real condition was to watch them from a distance before going into the pen, when the character of the respiration, which is at all times more rapid than in man, could be noticed.

The greatest care was taken and the most approved methods employed to render all operations as nearly aseptic as possible, though this was really comparative, in animals with fur and skin and living with others in a pen. Shaving the fur was found to be too severe for the delicate skin of the rabbit and it was given up, and the fur closely clipped without any difference in the results. Iodoform was used freely to dust or fill wounds. A saturated solution of iodoform in collodion was used to cover the external wound, pedicle of lung or sutures and to seal suture holes in skin where no external dressings were used. Wounds were sutured in various ways, with interrupted and with continuous sutures *en masse* and layer by layer, and where the tissues were carefully approximated and no spaces left the wounds healed most rapidly and satisfactorily. The skin was not allowed to close until the deep wound had healed. The same operations were dressed differently in every possible way to see results, but no difference was noticed.

The whole number of operations done was 27 in 20 rabbits. Of these there were pneumonectomy, 8; attempted pneumonectomy—laceration of lung, chest packed with gauze, 4; thoracotomy (operation stopped at this point from bearing ether badly or other causes), 3; suture of lung to chest-wall, 8 (3 primary, 5 secondary operations); pneumonotomy, 1; accidents, 3 (too much ether 1, hemorrhage and shock 2). The following six cases illustrating pneumonectomy, attempted pneumonectomy, with laceration of lung and chest packed with gauze and lung suture were reported, and the specimens from each exhibited:

CASE I.—*Pneumonectomy—Right Lower Lobe.*—Female rabbit, 5 pounds; operation February 4, 1892. Hair clipped and shaved; etherized; incision over seventh interspace, right side. Slight bleeding and retraction of different layers of muscles. Pleura opened in seventh space; lung seized with ring forceps, drawn through chest-wall, and sutured to intercostal muscles with five deep sutures. Ligated lung; sutured deep, and superficial muscles separately, and left pedicle of lung outside; applied iodoform collodion to pedicle, skin drawn closely about pedicle, and collodion again applied. Ether stopped, ʒi having been given. Dressed with sterilized gauze, cotton and gauze binder applied. Time, 40 minutes. Reaction rapid; respiration excellent; no rales. February 10th—External wound healed; no pus; washed with bichloride sol. (1:2000). February 21st—Removed skin sutures; found considerable cheesy matter evidently from stump of lung; cleansed with peroxide of hydrogen (Marchand's); packed cavity with gauze. February 24th—Redressed; less cheesy matter; wound curetted and peroxide applied;

wiped dry and applied dry dressing; no gauze in wound. March 8th—Almost healed; small lump of hard, cheesy matter at skin opening; dressed with iodoform collodion; no gauze. March 10th—Wound scabbed over; rabbit well. *Autopsy;* April 15th—Rabbit killed; wound in right side seen only in skin and deep muscles; seventh space depressed. Large amount of upper and back part of lower lobe removed; most of upper and middle lobes adherent to fifth and sixth interspaces. Lower lobe below wound attached by firm adhesions to eighth and ninth space; some adhesions to diaphragm. Pleura not otherwise involved; upper and middle lobes somewhat dark in color; lower lobe healthy and inflated.

CASE II.—*Pneumonectomy—Right Lower Lobe.*—Female rabbit, 6¼ pounds. Operation February 18, 1892. Clipped hair; scrubbed and etherized; incision over seventh interspace, right side, below and behind scalpula, when drawn forward; pleura opened, upper part lower lobe caught and drawn out of wound and sutured in intercostal space; considerable bleeding; closed intercostal wound with four catgut sutures through lung and muscles; one around two ribs to maintain pressure on pedicle; deep muscles, superficial muscles and skin sutured separately and drawn snugly about pedicle; iodoform collodion applied; sterilized cotton and gauze dressing. Time, 30 minutes; reaction good. February 25th—Outer wound healed and scabbed; opened wound; some cheesy material between muscles; cut and removed catgut sutures; soft, and all but one unchanged; cleansed with peroxide, dusted with iodoform and packed loosely with gauze to prevent skin healing too soon for deep wound; dressed, thick compress and bandage. March 5th—Went too long overlooked; wound through muscular layers filled with cheesy matter; curetted; wiped out with bichloride gauze and iodoform applied, outer wound kept open with gauze. March 10th—Removed gauze; wound very shallow; dressed with bandage only. March 12th—Bandage removed as litter of four rabbits were born; sealed wound with collodion. March 20th—Wound healed. *Autopsy:* April 15th—Rabbit killed; weight 6⅛ pounds; lungs fully inflated and normal; lower lobe attached firmly at seventh and eighth spaces to edges of intercostal wound; no other adhesions; upper half lower lobe removed; except scar in skin, no evidence of operation until rib muscles were reached; seventh space depressed.

CASE III—*Attempted Pneumonectomy.*—Female rabbit, 6 pounds. Hair clipped, disinfected and etherized; incision left side, fourth interspace; too much ether; revived by aromatic spirits of ammonia; great difficulty in keeping under ether, and when lower lobe was caught and drawn through intercostal incision, animal struggled and lung began to pinch off; second forceps applied, but lung was torn and dropped back into chest cavity; a strip of sterilized gauze was hastily packed into the pleural cavity, firmly into apex, less firmly downward, so as not to press on heart; intercostals, skin and muscles hastily sutured and gauze allowed to protrude from wound; some puffing before suturing was completed; iodoform collodion applied; one hour after, rabbit had reacted well; some rales over left chest; three hours later external antiseptic dressing applied. February 17th—Rales and emphysematous sounds; no evidence of discomfort. February 21st—Removed dressing and sutures; some cheesy material found among muscular layers; gauze tightly adherent to deep muscles and lips of intercostal wound; gauze strip only partially removed from within thorax for fear of setting up hemorrhage; fresh gauze packed in behind first to give pressure. February 24th—Gauze packed in wound at last dressing removed; cheesy material covering wound in deep muscles scraped off and thoroughly cleansed, dusted with iodoform; gauze in pleural cavity withdrawn a little more, and found one intercostal suture had been passed through gauze strip, preventing otherwise rapid removal; fresh gauze packed in about old gauze plug; wound in excellent condition. February 28th—Removed 12-inch strand of gauze, cut stitch in intercostal wound; no pus; dusted with iodoform; packed wound with dry gauze. March 1st—Withdrew 15-inch strand of gauze thick as a lead pencil; found serum in chest cavity, wiped out with bichloride gauze, and loosely packed entire wound; dressed, compress and bandage. March 5th—Dressing and packing removed; wound curetted; no packing; wound looking very well; compress and bandage; rabbit in excellent condition. March 13th—Wound very shallow; thoroughly dressed; no bandage. March 20th—Entirely healed. *Autopsy:* April 13th—Rabbit killed; no loss of weight; adhesion of two pleural surfaces with some effusion; lungs normal; inflated with blow-pipe fully; on cutting through healed wound in fourth interspace, a strand of gauze was found.

The following case is a contrast, the gauze that had been packed in the chest during the operation not having been subsequently removed:

CASE IV.—*Resection of Third and Fourth Ribs—Attempted Ligation of Lung in Chest.*—Operation March 20, 1892. Female rabbit, 6 pounds; incision in left side behind leg, stretched forward; ligated ribs for vessels and cut between them; no bone removed; caught lung with right-angled forceps and tried to ligate the withdrawn lung, but it tore off and dropped back; chest quickly packed with two strips of bichloride gauze, ends projecting, and placed pad of gauze over ribs, completely filling wound. Thick gauze compress over all, lamb's wool and bandage; very weak, but revived with whisky and water, and in two hours doing well. March 23d—Removed dressing; wound in good condition; no cheesy matter. Found gauze in pleural cavity moist; cut off projecting ends at intercostal space, and left packing within chest. Deep and superficial wound dusted with iodoform, bichloride gauze; compress over wound, wool and cotton well up under leg. Plaster of Paris bandage applied; very difficult to get bandage stiff enough and far enough up under foreleg to prevent movement and not to be cruel to animal. March 27th—Removed plaster bandage; had done some good by limitation of movement; not so much cheesy matter; seems to be a fatty degeneration of connective tissue. Iodoform, no gauze; reapplied cast with firm compress beneath; no attempt made to remove gauze in deep wound, which was left as foreign body to see results. March 31st—Removed cast; wound closed on compress; large amount of cheesy matter retained, and welling up from deep wound; cleansed, iodoform, firm compress and cast reapplied. April 5th—Found pus in wounds; syringed out with bichloride solution 1:2500, and curetted wound. Pleural cavity apparently closed. Muscular wound long and tortuous; friction not entirely stopped by cast; enough gauze packed in wound to keep skin apart; dressed; compress and bandage only.

Autopsy—Rabbit killed April 12th; wound in skin and muscles opened; considerable cheesy matter in track of wound, which had the appearance of a sinus. Intercostal wound closed by gauze and cemented by cheesy material. Left pleural cavity so tightly packed with gauze that it encroached on the other side behind the heart. Gauze firmly adherent to parietal pleura and agglutinated together; could not be removed from cavity without considerable force; diaphragm attached to gauze and held high on left side. Right lung healthy; fully inflates from trachea; upper left lung above second rib collapsed; respiration entirely with right lung.

CASE V.—*Lung Suture—Secondary Operation, on Case I.*—Operation April 1, 1892. Two sutures passed on left side through skin and deeper tissues; lower suture through tenth and out ninth interspace, from angle of rib towards sternum, inserted deeply to catch diaphragm as well as lung; upper suture in eighth and out sixth, toward sternum, through lower lobe, both drawn firmly and tied on skin; iodoform collodion applied to seal sutures and stitch holes; condition good as before; respiration good. *Autopsy:* Abdominal viscera normal; cheesy pus within and without thorax in course of catgut sutures and in left lobe of liver, into which lower suture passed; lower lobe of lung, diaphragm and liver adherent to chest wall from sixth to tenth rib; upper lobe and upper back part of lower lobe normal and inflated; condition of rabbit not changed, though altogether not more than one lung to breathe with; no evidence of sepsis.

CASE VI.—*Lung Suture—Secondary Operation on Case II.*—Operation April 1st. Three sutures passed on left side through skin and deeper tissues, put in deeply to catch diaphragm if possible. One in eighth and out sixth space; second in eighth and out seventh space; third in seventh and out sixth space; sealed suture and stitch holes with iodoform collodion; no attention required. *Autopsy*—Sutures in position holding lower lobe of lung, diaphragm and liver, against chest-wall from seventh to ninth rib; pleura perfectly smooth, healthy, and lung inflated, only a trace of softening about sutures; no deposits of pus within or without thorax, and no signs or evidences of sepsis.

Conclusions.—The speaker, as the result of his experiments, had arrived at the following conclusions:

1. Do not suture skin wound except for purposes of pressure, as it heals too fast for deeper tissues and retains discharges, and seems to provoke formation of, or at least to retain cheesy matter.

2. Close external wound with interrupted sutures, as skin and muscles are so loose that they pucker and do not heal rapidly.

3. Suture deep muscles layer by layer very carefully, so as not to leave spaces, and to superficial muscles, but not to skin.

4. Leave no more stump of lung than necessary, and the smallest pedicle, which will be safe.

5. Without any constitutional evidences of sepsis (the greatest care and cleanliness being used), it seems that rabbits have a tendency to the

formation of a cheesy pus in the healing of all wounds, operative or otherwise.

[NOTE.—This cheesy material was carefully examined on several occasions by Dr. George Lasher and Dr. Lula T. Ellis, who found that it consisted of pus, broken down granulation tissue, young cells, bacteria, but not tubercle bacilli.]

ABSTRACT OF THE REPORT OF THE COMMITTEE ON GYNECOLOGY

Of the Medical Society of the State of California, April, 1892.

By W. A. BRIGGS, M. D., Chairman, Sacramento.

The Septic Origin and Antiseptic Treatment of Chronic Endometritis.

The causes of endometritis may be advantageously divided into predisposing and exciting, and the former again into systemic and local. The systemic predisposing causes embrace all of those general conditions that favor suppuration. Foremost among these is the tubercular diathesis. Syphilis, chlorosis, rheumatism, gout, the acute exanthemata and herpes, exert a similar influence. Among the local predisposing causes, two may be placed above all others, namely: denudation of the tissues and the production and stagnation of media suitable for the nutriment and propagation of pathogenic microörganisms. These conditions are furnished in their most exquisite form by the physiological traumatism accompanying and following menstruation, abortion, miscarriage and parturition. Traumatism of the genital tract, of whatever origin, falls in the same category. Cotton or lamb's wool dressing, if not antiseptic, or if retained indefinitely, affords the best possible nidus for the lodgment and multiplication of bacteria and their subsequent infection of the uterus. The recumbent position in child-bed, or in disease, hinders the discharge of the lochia and secretions, while flexions, growths in or about the uterus, and backward displacements, hinder the uterine circulation, produce stasis, impair the local nutrition, and favor excessive secretion. Constipation acts in the same way, besides impairing the general health and the nutrition of the uterus itself. An open vulva, due to rupture or relaxation of the perineum, laceration of the cervix, especially when associated with vaginal leucorrhea and uncleanly habits, as well as mere prolapse, favor infection.

But any or all of these conditions may exist without inflammation. Something else is needed; something else is absolutely essential to the genesis of endometritis. This something else is infection—an opinion first promulgated by Schroeder and since abundantly confirmed by the bacteriological researches of Peraire, Winter, Doléris and numerous others. With gonorrheal and tubercular endometritis their specific cocci and bacilli are invariably associated in causative relation. Since the days of Semelweis, every possible scientific requirement in the demonstration of the microbic origin of puerperal fever and the allied infections, has been met and satisfied. But endometritis, dating from puerperal inflammation, is but a continuation of the original infection. The same cocci, the same bacteria, may be found in the uterus, maintaining the inflammation they previously excited. In endometritis, of whatever origin, these microörganisms are invariably present, while they are as invariably absent from the healthy uterus. They may, then, justly be regarded as the real pathogenic agents in endometritis.

If our etiological conclusions be correct, in the cure of this disease, we must first establish an aseptic condition of the uterine cavity. In the second place we must, as far as possible, restore the endometrium to its normal anatomical condition. Lastly, we must remove the conditions favorable to the recurrence of the original trouble.

Antisepsis may be termed the "enabling act" of surgical gynecology. This is especially true of surgical procedures *per vaginam*. Without adequate antiseptic precautions the slightest abrasion may result disastrously. But antisepsis is not only the "enabling act" of surgical gynecology; it also constitutes the essential therapeutics of endometritis; and I make bold to suggest that Mr. Tait and his disciples deprecate what they contemptuously denominate "uterine tinkering," either because they do not apprehend these facts or because they ignore them.

The importation of pathogenic microbes should be prevented by the absolute interdiction of sexual relations during the whole course of treatment. Neglect of this precaution, no doubt, is not infrequently responsible for the failure of otherwise rational and painstaking treatment. Sexual intercourse having been relinquished, the vulva should be thoroughly disinfected. The vagina should then be irrigated, first, with an alkaline solution consisting of one ounce of common table salt dissolved in two quarts of warm water and then, with the antiseptic fluid, which may be either a quart of mercuric chloride solution (1:2000) or the same quantity of creolin (5 to 1:100). These ablutions and injections should be used twice daily, and always just before visiting the physician's office. Before invading the uterine cavity with the sound or applicator, the physician should carefully cleanse the cervical canal, which is greatly facilitated by the free use of some alkaline powder. When the secretion accumulates and stagnates, I have found it advantageous to cleanse the uterine cavity with injections of peroxide of hydrogen (Marchand's).

Having thus cleansed the uterine cavity, the next step is to put it in a thoroughly antiseptic condition; this to be accomplished by the conjoint use of antiseptic remedies and cataphoresis, and in certain cases of curettage. In my earlier gynecological work, tincture of iodine was quite in vogue and gave me many a *mauvais quart d' huere* in my office. Repeated experiences with uterine colic diminished my zeal as well as that of my patients for this form of treatment. The monotonous futility of the applicator, however, drove me to the resumption of injections, with the previous result. Notwithstanding this unpleasant and unsatisfactory experience, I have latterly resumed intrauterine injections, although in somewhat different form, with different purposes, and invested with greater precautions. I use them now as but one element of a systematic and consistent whole—the antiseptic treatment; and, I feel sure, with better results, immediate as well as remote.

After considerable experimentation, I found that camphor-creasote is an excellent solvent for iodine, and, over alcohol, possesses the following advantages: (1) It does not coagulate albumin. (2) Being thick and oily and having no affinity for water, it does not come in such rapid contact with the mucous surface, and hence, is not so likely to produce severe pain. (3) It dissolves by far the largest ratio of iodine of any liquid with which I am acquainted—roughly estimated, about 25 or 30 per cent., by weight, and hence, can be used in a correspondingly smaller quantity, and with marked immunity from uterine colic. Occasionally, it must be confessed, it will provoke considerable pain and even colic, but I believe much less frequently than tincture of iodine, and if properly used, very rarely.

The formula is as follows:

℞ Camphoræ	**gm.**	**16**
Creasoti fagi sylvat.	**c.c.**	**6**
M. solve et adde.		
Iodinii resub.	**gm.**	**7**

If the orifice be not patulous enough to permit the ready outflow of the injection it should be sufficiently dilated by Hegar's bougies. For these injections I take a deep urethral syringe, with small terminal and lateral perforations, wrap the last three inches of the nozzle with a thin layer of absorbent cotten, dip it in the iodized camphor-creosote, pass it quickly through the cervix to the fundus and, expressing two or three minims of the solution at a time, spread it thoroughly over the entire mucosa. During this process, careful watch should be kept to see if the injection escapes freely, and, if not, the cause should be ascertained and removed before proceeding further. Injections should be limited to ten or fifteen minims, and repeated every second or third day, and, as improvement manifests itself, every fifth or seventh day.

Having made the injection, we are now prepared for cataphoresis, which is done by introducing into the uterus a platinum electrode, whose active surface corresponds in length with the uterine cavity and constitutes the positive pole of the utero-abdominal current, varying from five to twenty milliamperes. The electrode is covered with absorbent cotton, saturated with iodized camphor-creasote, and made to sweep the mucosa in its entire extent, not neglecting the cornua. The sitting lasts from five to ten minutes and is repeated with each injection. If the case be a hemorrhagic one of recent origin, the current is raised to thirty, forty or even fifty milliamperes, and the application repeated if necessary weekly during one or two intermenstrual periods. The uterine mucosa is capable of active absorption, and under the influence of electricity we may introduce considerable quantities of iodine or other remedy into the general circulation. This fact may be of importance in uterine cataphoresis. After treatment, patients will often complain of a metallic taste before leaving the office, and sometimes before leaving the gynecological chair.

In the algesic form of endometritis the positive pole produces sedative effects that render it doubly valuable. Pain will be often markedly relieved by three or four applications. Whenever the uterine cavity is enlarged and the uterine tissue flabby it will be advantageous to combine the faradic current with the galvanic, which is easily done by means of double cords terminating in single electrodes, to continue it for ten minutes, and repeat it every second day. This treatment is of marked benefit, not only in the relief of pain, but also in the promotion of uterine circulation and the absorption of inflammatory exudates.

In confirmed hemorrhagic and hypertrophic endometritis it is difficult, if not impossible, to restore the diseased mucosa to its normal condition; nothing less than its destruction will produce a satisfactory result. For this purpose we have several means at command—chemical cauterization, positive galvano-chemical cauterization and curettage. Nitric acid and chloride of zinc are undoubtedly efficient, but it is impossible to limit their action to the diseased structures, and so often do they entail cicatrices stenosis, and sterility that their use is altogether indefensible. The same objections, perhaps, although in a far inferior degree, apply to galvano-chemical cauterization. But in recent cases, or in inveterate ones, in which the patient will not consent to its use, we have in positive galvano-chemical cauterization a sovereign remedy, which, if used by the antiseptic method, is altogether free from danger. By the cataphoric action of the positive pole the eschar becomes aseptic from absorption of iodine, and, in my experience, breaks down and passes away without the slightest untoward result. Besides, the acids generated at the positive pole are themselves more or less antiseptic and assist in the general effect. For the purpose of a cauterant, the current should vary from 30 to 60 milliamperes, and be maintained from five to eight minutes in weekly sittings. With the large currents recommended by Apostoli I have had no experience in endometritis, but I must confess to a prejudice against them, which must be overcome, if overcome at all, by positive and indisputable evidence of their freedom from untoward secondary effects.

Curettage, however, I prefer. My own experience leads me to concur in the opinion that properly done, in properly selected cases, it is one of the safest and not the least efficient of surgical procedures. In hemorrhagic and hypertrophic endometritis the uterine mucosa is soft and pulpy, and, moreover, it is an essential feature of curettage that it leaves the terminal *culs-de-sac* of the mucous glands as a basis for the regeneration of the membrane. The sharp curette of Sims, therefore, and the cutting spoon of Simon are out of place in this condition, and I habitually employ the irrigating curette with an edge, as Pozzi says, like that of an unfiled knife blade. The irrigating current should be turned on from a reservoir with a head not exceeding 18 or 20 inches. A bulb syringe should never be used, for it is difficult accurately to estimate the force exerted on the bulb, and the intrauterine pressure is liable to be raised to a dangerous degree. The curettage should be systematic and thorough, especially in the neighborhood of the tubal orifices. The irrigation should continue until the debris has been completely removed and the fluid returns nearly or quite colorless. The curette should then be withdrawn and 10 or 15 minims of iodized camphor-creasote should be introduced into the uterus by the syringe-applicator and spread over the entire denuded surface.

Drainage is the next, and an important element of the antiseptic treatment. In a large majority of the serious and annoying cases of endometritis coming under my observation, the uterus has been either retroverted or retroflexed, or both retroverted and retroflexed. These backward displacements are probably partly cause and partly consequence of the inveteracy of the inflammatory condition. In the first place they prevent drainage, especially in the recumbent position. The secretions stagnate, microbes multiply and maintain a constant irritation of the endometrium. In the second place they hinder the uterine circulation, produce stasis and malnutrition, and thus furnish conditions extremely favorable to the development and maintenance of inflammation. Such displacements, therefore, if possible, should be corrected early in the course of treatment, and reposition, if necessary, be maintained by antiseptic cotton or lamb's wool pessary. Artificial drainage, I believe, is frequently advantageous and occasionally necessary. Iodized candle-wicking, which is prepared by immersing the wicking in tincture of iodine and drying it without heat, seems to me to answer a better purpose than iodoform gauze. It should be introduced well within the uterine cavity and be supported by an antiseptic tampon.

The uterine treatment, whether of injection and cataphoresis or of curettage, having been completed for the day, we reach the question of vaginal dressing, which, while always antiseptic, will be determined in a measure by our views of the necessity or advantage of local depletion. As nearly every patient suffering with chronic endometritis becomes more or less anemic, blood waste in every form, even the menstrual flow, should be restricted rather than promoted. For this reason, and because I rarely witnessed any improvement even in the local condition from the application of either the natural or the artificial leech, I long ago altogether discarded local blood-letting. But glycerine, by its high specific gravity and affinity for water, as well as various hygroscopic powders, produce a free exosmosis from the engorged vessels, and thus effectually deplete them without impoverishing the blood. They also serve another useful purpose: By distending the vagina and inviting the effusion of considerable quantities of liquid, secretions and microbes, if unfortunately they escape all our previous precautions, are rapidly carried out of the body. Tampons of glycerole of tannin possess other advantages—they leave an astringent after-effect, which, in accordance with the law of diffusion of liquids, extends well into the cervical canal and probably into the uterine cavity itself; they support the uterus in case of displacement, and thus promote drainage, the uterine circulation, and the absorption of inflammatory exudates. The vaginal dressing, therefore, by promoting antisepsis, drainage, the uterine circulation, and the depletion, with subsequent contraction of the engorged uterine vessels, is an indispensable element of the antiseptic treatment.

Should the support of a tampon be unnecessary, and the astringent effect of the tannin undesirable, or should there be vaginal leucorrhea, dry packing with boric acid and sulphur (9:1) will be an excellent substitute. This dressing, whether of liquid or of powder, will produce considerable discharge from the vagina. A napkin, therefore, is necessary, for the purpose of cleanliness as well as to furnish the final element of the antiseptic treatment. It should be made of antiseptic gauze, worn constantly, and changed twice daily, after the vaginal injections.

ABSTRACT OF THE REPORT OF THE COMMITTEE ON OBSTETRICS.

Of the Medical Society of the State of California, April, 1892.

By G. P. REYNOLDS, M. D., Chairman, Alameda.

The speaker in this paper wished to emphasize certain facts already well established in the practice of midwifery, and to touch upon a few points sometimes overlooked by the profession. Child-birth, in itself, was a physiological condition—he would only consider it pathologically.

Unfortunately, civilization does not tend to lesson either the sufferings or the perils of the lying-in woman. We all well know that in primitive life the complications which meet the general practitioner were comparatively unknown. The main cause of this difference lies in the fact that the nervous system is developed and educated at the expense of the physical. The American girl is placed in school at the age of six, and compelled to sit in a cramped, uncomfortable position five or six hours a day. Frequent deformities result from this cause alone, particularly those of the spine and pelvis. As her education advances, the hours of confinement in school are increased; home study is required of her, and the study of some accomplishment is added, and all this with no counteracting physical exercise. The pursuit of the higher education, the demands of society and fashion finish the work, and we behold her, as a woman, a physical wreck.

How are all these things to be corrected? By a systematic and continued course of physical culture, in constant connection with the intellectual development. Society must be educated to a different standard of physical perfection in women. The present delicately organized, small-waisted, artificially developed creature, must give place to a nobler proportioned model, before our girls can come into their rightful inheritance as women. We must begin with her earliest education; take from our schools the course of study as it now exists, and change it to an elective one, one which may be adapted to the needs and capabilities of the individual. Make it fashionable to pursue out-door sports, and make her young life an active one. It is true that a reaction is beginning to set in, and in towns where, for the past few years, bicycle riding and tennis have been in vogue, the increased vigor and strength of the young women cannot have failed to attract the attention of even a casual observer. Some of our modern schools are provided with gymnasiums, and physical culture is now taught in a few private and scattering classes

He wished to emphasize the necessity for an intimate acquaintance of the physician with the conditon of a pregnant woman. It is a too common occurrence, in private practice, for a physician not to see his case until after labor begins. Every woman should be cognizant of the fact that her doctor knows her condition, and that he takes every precaution for her good and safe delivery. The presence of tumors, injuries from previous labors, malposition of the uterus, the pelvic measurements, and the size and condition of the fetus might be discovered, and many a woman might be saved the mortification and expense attending a preparation for confinement, if this custom were carried into effect; for it not infrequently happens that women go to or beyond their expected term of gestation, to find themselves mistaken as to their condition.

Antiseptics have done much to diminish the mortality of lying-in women, and in this department the art of midwifery is in the path of progress. The use of antiseptic confinement pads, as active agents in the cause of antiseptic midwifery, is to be strongly recommended, though an old rag is usually thought to be good enough for this purpose. Modern antisepsis has taught us that if we purify our houses, our persons, and everything pertaining to or coming in contact with a lying-in woman, we are but observing very necessary precautions to avoid infection.

For some years past the speaker had adopted the practice of requesting all patients to submit to an examination from one month to six weeks after confinement, and he was surprised to find that fully 50 per cent. revealed some abnormal condition yet remaining to be corrected. Our patients of to day, and those of even a quarter of a century ago, are certainly not to be compared. Society, customs, dress and habits of life, all tend to pervert the natural progress of involution and subinvolution, and instead of having a patient with a uterus in its normal position and condition, we find one with an inherited and acquired constitution tending to the reverse.

The slightest cause stops the process of involution, and the patient, with weakened muscles and poor constitution, is a fit subject for misplacements and general pelvic inflammation. Many physicians in normal labor pay their patients from two to five visits after confinement, and never make an examination. What can we expect but that a patient whose system is already weakened by a long term of gestation and exhaustive labor, and domestic cares and responsibilities, after waiting patiently for a few weeks or months, or perhaps years, to grow stronger, will finally go to some specialist and say that she has never had good health since her baby was born?

Much variance of opinion exists as to the time of allowing the patient to get up. Obstetricians should certainly insist upon a longer rest in bed than is customary. When we see her up in two or three weeks after child-birth, the nurse dismissed, and assuming the care of baby and household, possibly at the end of four or six weeks participating in social pleasures and fatigues, we can easily understand that the process of involution is delayed. No specified time can be laid down in this matter. Some are better able to get up at the end of twelve days than others after six weeks, and the physician must be the judge. It is certain that no one has ever been injured by the simple fact of remaining in bed, while thousands are victims of serious troubles resulting from too early rising.

There is evidently an increasing demand from our patients for the use of anesthetics. It was formerly held by the most conservative that only in operative midwifery should an anesthetic be administered. To day we find a growing inclination with most practitioners to administer chloroform or ether during some period of all cases of labor, which are accompanied by very much pain. The risk in giving anesthetics is much less in this class of cases than in any other, though it is claimed that the danger from hemorrhage is much greater. While that may be true, relief from shock and from suffering compensates for a moderately increased loss of blood.

Chloral is a remedy of almost incalculable value in prolonged first stages, and which practically supersedes all other methods of dealing with this troublesome condition. From 6 to 10 or 15 grains, once or twice repeated in 15 or 20 minutes, either by mouth or rectum, is generally sufficient to produce an effect lasting for several hours. No other anesthetic or anodyne has gained any prominence within the last year, excepting some of the coal-tar preparations, phenacetine and antikamnia.

Immediate closure of the lacerated cervix is still a debatable question, the records of operations affording but little ground to the practitioner, excepting in cases where there is arterial hemorrhage, endangering the life of the patient. There is no doubt that immediate closure exposes the woman to increased danger from infection, but many cases, if properly treated, will unite if left to themselves, although closure can readily be made, if the patient is under chloroform for other operations, at the time of delivery. As to laceration of the perineum, any physician who allows that to go unrepaired, is open to severe criticism.

The speaker did not believe that a healthy woman could have eclampsia, and it therefore behooved the practitioner to see that every pregnant woman was brought to her labor in as healthy a state as possible. If this, and the general care needed in cases of confinement, were observed, the frequency and mortality of convulsions would be greatly lessened. This condition is estimated to occur once in every 400 pregnancies, and that one in eight cases dies. No woman should think of going through the term of gestation without submitting her urine to the physician. It is, however, quite certain that the cause of puerperal convulsions is far from being settled, and that cases occur with or without albumin; that the latter may appear after convulsions, or that there are exceptional cases in which albuminuria is absent throughout.

The management of cases requiring Cæsarean section, laparotomy, placental delivery, or craniotomy, are subjects being more thoroughly discussed than any others pertaining to midwifery. Until we can have more reliable records for our guidance we shall be wholly at sea. The question which to-day most interests the practitioner in this class of cases, is how to treat extrauterine pregnancy. Their frequency, and the ability to recognize this condition, are much greater than formerly.

Munde says: "The diagnosis is not usually very difficult when once we have had our attention called to its probabilities, and in view of the serious nature of the trouble, and of the great success of proper treatment, we should always, when suspicious symptoms are present, consider the case one of extrauterine pregnancy until we have proved the contrary." He further says: "In all cases seen before the end of the fourth month, and in many cases seen later, the destruction of the ovum by means of the electric current is the safest, most certain and most efficient method of treatment, this having succeeded in every case in which it was properly applied."

On the other hand, Dr. Reed, in the *American Journal of Obstetrics*, assumes that the only proper treatment for ectopical gestation is by abdominal section. Electricity has proven to be uncertain in its success in these cases, dangerous in its application, and tardy in its action. He says that the only proper treatment of ectopic gestation is by abdominal section; that the operation should be done before rupture, as soon as the condition can be properly diagnosed; that the operation should be done in all cases as soon as evidence of internal hemorrhage becomes apparent, and without awaiting for subsidence of so-called shock, or delaying to attempt the differential diagnosis between extra and intraperitoneal hemorrhage.

Prof. Byford says that we are in the heroic age in the treatment of extrauterine pregnancy, and where the lines that are to guide us are to be finally laid down, has not yet been determined. Formerly we only discovered the fatal cases, while now we are discovering those that get well, and when we have learned to diagnose all of these cases, we will find that the death rate of all taken together is a small one. As to treatment, where we find that a great many get well without interference, we have learned, on the other hand, that we can easily cure nearly all of them by abdominal section.

The speaker concluded his paper by discussing at some length the indications for operation at the different stages of pregnancy.

ABSTRACT OF THE REPORT OF THE COMMITTEE ON DISEASES OF THE MIND AND NERVOUS SYSTEM.

Of the Medical Society of the State of California, April, 1892.

By A. M. GARDNER, M. A., M. D., Chairman, Napa.

Bettered Facilities for the Treatment of the Canvalescing Insane.

The speaker's reason for selecting the subject "Bettered Facilities for the Convalescing Insane," rather than attempting a resume of the entire subject of mental and nervous diseases for the past year, was that he wished to present one of the important needs of his specialty.

Ever since the establishment of the State Asylum at Stockton for the insane, the State has assumed the entire responsibility of caring for and protecting this unfortunate class of people. How well the State has fulfilled, and is still fulfilling its self imposed obligation, may be determined, in a measure, by taking under consideration the existence of the State Asylum at Stockton, the Napa State Asylum, and the State Asylum at

Agnews, now in operation; while two new structures for like purposes are now in course of erection, one at Ukiah and the other at San Bernardino; making, in all, five large and costly institutions, which will be devoted to this special work.

It may be of interest to state that the construction and furnishing of the Napa Asylum cost the State $1,750,000, and that this institution, upon its completion, was intended to furnish a home for 600 people. The average cost of each individual was, therefore, $2,916, or very nearly $3,000. How many of this State's sane population can boast of a $3,000 home?

It is fair to assume that if the present rate of increase of the chronic insane continues in the same ratio in the future as it has in the past, the time is not far distant when the State will have to appropriate nearly $800,000 yearly, for the care and protection of its insane. The different sums of money set apart by the State, for the fiscal year ending June 30, 1891, were, for the State Asylum at Stockton, $207,500; Agnews, $125,000; and Napa, $204,000—a total of $536,500. This does not, however, represent the entire cost of conducting these three institutions during the year, as each has a contingent fund from which to draw for needed improvements, furnishing and repairs.

When the State Asylum at Ukiah and the State Asylum at San Bernardino are both ready for occupancy, if the same amount of money is appropriated for the maintenance of each as has been appropriated for the new asylum at Agnews, viz.: $125 000, the entire sum needed at that date to maintain and care for our insane, will amount to $768,500 for each year.

In view of this large sum of money to be appropriated yearly for this special work, not taking into consideration the cost of erection of the new institutions, are we justified in asking for special appropriations to meet a long felt need at the asylums now in operation? If it can be shown that the amounts asked for can in a reasonable length of time be saved to the State in lessening the general appropriations for maintenance, then, from a financial point of view, we have a right to make, and it would be sound policy for the State to grant our requests.

The daily average *per capita* expense incurred during the past 15 years in caring for the insane at the Napa State Asylum has been 40½ cents for each individual, or about $179 yearly for each person admitted. Of 6,701 patients admitted during these 15 years, a fraction over 27 per cent. were discharged as recovered. Had it been possible to have increased, through better facilities for treatment, the 27 to 32—that is, an increase of 5 per cent. over and above the number that were discharged as recovered, we should have 335 patients out of the total number admitted restored to health, to their families and to the State, to become once again producers rather than consumers of its treasure.

These patients, however, under the conditions which have existed in the past, and which are now existing, have gradually, but none the less surely, passed into a state of chronic incurable insanity, to rest as a burden upon the commonwealth until the end of their miserable existence,

While it is a difficult task to arrive at the average age of the chronic insane in any institution, still, by glancing over our reports, I find that during the 15 years already mentioned, allowing two years to pass to represent the time intervening between the initial stages of the attack and the date when the disease became chronic, that the average time the State cared for these patients was a fraction over four years.

Taking the figures already given it would cost the State $738 to care for each of its chronic insane for these four years. If it costs $738 to care for one person for four years, it would require $247,353 to care for 335 chronic patients for the same length of time. These 335 chronic insane patients constitute 5 per cent. of the whole number admitted, and also the 5 per cent. which should have recovered with better facilities for treatment. If it cost the State $247,353 to maintain them as chronic insane patients for four years, the State, upon the other hand, would certainly have saved a like amount in the same length of time had they been discharged as recovered before relapsing into chronic insanity. This assumption is purely a matter of opinion, but nevertheless an opinion which I believe to be correct; and if so, justifies special appropriations in order to secure better facilities.

If special appropriations are granted, how shall they be utilized to secure this additional 5 per cent. of recoveries? By building cottages separate from the main asylum, where the convalescing insane can receive that individualized treatment which is, without doubt, the ideal treatment of those persons so afflicted.

It is the general complaint of those engaged in this special work, that all State institutions are overcrowded, and the Napa Asylum is no exception to this general rule. As previously stated, this institution was originally intended to accommodate 600 patients. Its capacity was later increased to 810 patients, which can be comfortably treated and cared for in this asylum. To-day, however, we are attempting to treat and care for over 1,400 insane people.

This overcrowding necessarily obviates the most limited classification, such as the segregation of the enfeebled and filthy, the violent and noisy, and the epileptic insane. And if even this limited classification cannot be satisfactorily carried out, how is it possible to classify and place in proper surroundings our convalescent patients, among whom will be found those, and those only, who are susceptible to improvement and recovery?

Admirable as our asylums may be as homes, without the hope of ultimate recovery, they will stand as an evidence of philanthropy's saddest failure. Sad, indeed, would be the lot of many of the insane were it not for the looking forward to going home restored "some sweet day, by and by." When the insane have passed through the acute stages of mania or melancholia, we are compelled, perforce, to transfer them to wards occupied by the chronic insane, where, with benumbed intellect and dazed understanding, they commence to form habits which are either conducive to their recovery or to a perpetuation of their disease. What the result will be, it requires no great stretch of imagination to predict. Many of those so situated will remark: "My God, Doctor, if I have to witness such sights, I certainly can never get well." And in this instance the insane patient asserts a fact that is only too frequently verified by further observation.

The insane are more imitative in their habits or character than the sane. They often do what they see those about them doing, through the principles of sympathy, imitation, and suggestion, and they seldom assign any reason for their actions.

Another important fact is that often times the mental manifestations of disease through fixation of habit are prone to continue after the physical disturbances that originated them have subsided. The highest expression of will is represented by a consensus of all the coördinated mental activities of the individual. The will-power of the convalescent insane is not lost; it is simply weakened and perverted. Will placing the convalescent patient among the insane tend to strengthen the weakened will-power, or correct its perversions? Will those motives be found among the chronic insane that shall direct the enfeebled will into channels leading up to permanent recovery? The almost united testimony of all alienists from the day of the immortal Rush down to the present time answer no.

Moral feelings are almost universally dulled or perverted in all forms of insanity. This is especially true of mania and melancholia. In the former we find emotional states of depression. In either of these conditions the patient, after passing through the acute stages, and having reached the period of approaching convalescence, becomes an inmate in our chronic wards, there to associate with and acquire the habits of those who have crossed over the line which separates a probable opportunity for recovery from ultimate and hopeless fatuity.

Is it possible that a convalescent insane patient can pass day after day in company with the chronic delusional lunatic without having his already disturbed affective feelings advanced toward permanent wreck and ruin? Can the convalescing melancholiac, tottering upon the brink of a relapse, and with an anxious terror still partially dominating his affective feelings, listen to the wild ravings of patients in epileptic furor, or the tremulous, hesitating enunciation of the paretic dement, and rejoice in the belief that he is on the high-road to recovery?

The fault that such conditions obtain at the different asylums is owing to the constant accumulation of the chronic insane, with the resulting overcrowding. A partial solution, at least, of the question may be embodied in a few terse propositions:

(1) We would ask the State for a special appropriation of $50,000, with which to complete and furnish, at the Napa State Asylum, two hospitals for the treatment of recent cases of insanity.

(2) By increasing our recoveries 5 per cent. the State will save yearly over $50,000, after granting the appropriation, through lessening the number of chronic insane.

(3) That if these deductions are correct, it would be sound policy, from a financial and from a humanitarian point of view, to grant the appropriation, for the curable should be cured at any cost, and human sympathy and kindly care should ever be extended to the unfortunate incurable.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal., and
HENRY GIBBONS, JR., M.D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Dysmenorrhea and its Treatment.—DR. E. L. MAGINNIS says one of three conditions will be always found to exist in dysmenorrhea. (1) A neurotic or highly nervous temperament. (2) An unhealthy uterus. (3) Inflamed ovaries. Dysmenorrhea, due to the first of these conditions, is the easiest of all to diagnose, but the most difficult to treat successfully, especially among the higher classes of society; nevertheless, strict attention to the laws of health and a general treatment, consisting of calisaya, iron and hypophosphites, combined with the faradic current, will generally effect a cure. Place the electrodes on the abdomen and under the lumbar region, and apply as strong a current as the patient can bear. The *séance* should continue for about eight minutes on every other day for nearly a month before the expected period, and it may even be necessary to persist in the treatment during the following month. Dysmenorrhea due to an unhealthy uterus may be caused by any condition of that organ whereby the passage of the ovum through its canal is rendered abnormally difficult. Chief among these conditions are stenosis of the canal, congenital, accidental anterior, posterior, and lateral displacements; mural and sub-mucous fibroids; polypoid growths; metritis and endometritis. None of these cases are permanently relieved by internal medication, but some good may be done by the local application of remedies in metritis and endometritis. The holding in place of flexed or verted uteri by pessaries will also accomplish much, and in stenosis of the canal or os, as well as in cases of polypi, operative procedure is indicated. But in mural and sub-mucous fibroids and dysmenorrhea caused by metritis and endometritis, nothing has given me such universally good results as the galvanic current, applied according to Apostoli's directions. His electric treatment of fibroids is well known, and for the treatment of inflammation of the uterus, or its lining membrane, his method is as follows: Having thoroughly douched the vagina with an antiseptic solution, and inserted the forefinger of the left hand in the os uteri, the intrauterine electrode should be run along the finger and introduced into the uterine canal up to the fundus. Too much stress cannot be placed upon the importance of exercising the utmost care and gentleness in this procedure, as roughness might not only increase the existing inflammation, but cause a periuterine one. The clay pad having been placed upon the abdomen over the fundus, and the negative conducting cord connected with it, the positive cord should be attached to the electrode *in utero*, and the current turned on so gradually that no shock will be felt during its increase by means of a rheostat. The strength of the current should depend upon the resistance of the skin and the sensibility of the patient, never using more than can be borne with moderate discomfort, and never causing severe pain. About 30 milliampéres can generally be used at first, for a *séance* of from 3 to 5 minutes, increasing the strength of the current and the length of time at each successive treatment. The current should be very slowly shut off, and the electrode withdrawn with the same gentleness used in its introduction, after which the patient may rest with advantage. Dysmenorrhea due to inflamed ovaries may be recognized by its presence some days before menstruation, and its diminution afterward. Vaginal examination generally causes nausea, and reveals exquisite tenderness. Dr. Maginnis says, for years an operation has been considered the only cure for this condition, but in the clinic of the Woman's Hospital and his private practice, a complete test of the following method has rarely failed to obviate that necessity: Place a flat, pliable electrode over the inflamed ovary and a similar one beneath the lumbar region as the patient lies on her back. Connect them with a faradic battery and gradually turn on a current as strong as can be borne, the *séance* lasting eight minutes. After a few applications it will be found that a ball electrode connected with the positive pole can be tolerated against the ovary (the negative being on the abdomen) and a current of tension used thrice weekly. He applied it five minutes daily for a week before menstruation, and has rarely been disappointed in the prompt and painless appearance of the expected flow, and the eventual cure of the case. Complete rest and freedom from pressure are desirable during this course of treatment, and external applications of iodine should be avoided, as they render the skin intolerant of the negative pole.—*New York Journal of Gynnecology and Obstetrics*, January, 1892.

On the Lying-in Decubitus.—The dorsal position so constantly observed for several days after labor may be a mistake, for the following reasons: (1) The soft and enlarged uterus (especially when compressed by a tight binder) must gravitate backward, and so favor the retention rather than the expulsion of secretions. (2) When any breach of surface exists, the dorsal position, by retaining the lochia longer in contact with the injured parts, may lead to septic absorption and cause the collection of a quantity of lochial discharge *in utero*, which is liable to find its way into the patulous end of the Fallopian tubes. The semi-recumbent position on the hips, and the sitting posture for a few minutes, after the first 24 hours, aid involution, hasten the lochial discharge, and help to reëstablish the peristaltic action of the bowels, and the adoption of the prone position immediately after the birth of the child might hasten the delivery of the placenta, while perhaps obviating the necessity of its expression by hand.—*Medical Press and Circular*, February 10, 1892.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal.,
J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal., and
G. F. SHIELS, M. D., C. M., F. R. C. S. E., Surgeon Polyclinic, San Francisco, Cal.

Successful Suturing of Extensor Tendon of Finger Two Months After Injury.—MR. H. E. R. JAMES reports the case of a soldier, aged 22, injured by the point of a stone, weighing 30 pounds, making a contused punctured wound an inch from the distal end of the middle metacarpal bone of the right hand, completely dividing the extensor tendon. There was no fracture, but the finger dropped, and was useless, making the nature of the injury unmistakable. The wound healed under antiseptic treatment in ten days; the finger being kept in an extended position on a straight splint. No union of the tendon had taken place at the end of two months. The proximal end of the tendon retracted ¼ inch from the site of the wound, the distal end being over the most prominent part of the knuckle; making a gap of nearly ¾ of an inch. Under an anesthetic, and with antiseptic precautions, an incision 1½ ins. long was made parallel with and to the radial side of the tendon; the ends were found square-cut and somewhat spread out, and bound down by fascia. They were disengaged and brought together by a carbolized catgut suture passed three times through them with a round needle. The wrist was over-extended, and this position maintained by the use of a splint. The operation was done by the bloodless method. Union did not take place by first intention, there being bullæ containing bloody serum found about the wound after removing the dressing on the fifth day. It was again dressed and healed completely. Passive motion was used five weeks after the operation. The union is perfect and strong, although there is some adhesion between the cicatrix and tendon, which is becoming less as he continues to use the hand.—*British Medical Journal*, February 6, 1892.

A Rare Form of Dislocation of the Shoulder.—HAUSSON reports a case of so-called "luxatio erecta" of the head of the humerus. The patient, a woman, aged 41, whilst leaning on a door-post, with her forearm raised to the forehead, suddenly slipped and fell forwards, nearly striking her face against the ground. The patient was seen, after an interval of seven hours, the right humerus being found directed outward, forming, with the middle line of the axilla, an angle of about 170°. The arm was rotated inwards, the forearm retained in the horizontal position, and directed forward and inwards. The hand was in contact with the patient's head. The injured shoulder was less rounded than the other, and presented depressions both in front and behind. The axillary cavity was occupied by the head of the humerus, which pressed on the third intercostal space. Active movements of the arm were almost completely abolished, and any attempt to move the limb caused much pain. Chloroform having been administered and the scapula fixed, the author, standing on the injured side of the patient, raised the injured arm with his left hand, and afterwards, in bringing the distal extremity of the humerus to the middle line of the body, pressed the head of the bone toward the acromion with his right hand. In this way the dislocation was promptly reduced. The form of luxation in this case is thus explained: The arm being, at the time of the injury, in a position of over-abduction, an indirect force drove the head of the bone against the lower part of the capsule, which was probably torn over only a slight extent. As the head slipped downwards, on the side of the thorax, the neck of the bone became fixed in the small slit in the capsule, and the arm was retained in the elevated position.—*British Medical Journal*, February 6, 1892.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M. D., Sacramento, Cal.

Sympathetic Ophthalmitis.—At variance with the most recently accepted views of the bacteriological origin of sympathetic ophthalmitis, DR. D. J. GIBB WISHART believes that clinical evidences favor the older theory, that the influence is a nervous one, traveling, as he says, by the ciliary nerves through the ophthalmic ganglia of the sympathetic, trophic and the vaso-motor nerves, or by the optic nerve, exciting trouble in an eye otherwise sound, and so giving rise to the various conditions present. Although he does not entirely ignore the microbic theory, much of which is too problematic for him, he is inclined to regard the theory of mechanical irritation as more tenable. He divides the cases of eye trouble in which sympathetic ophthalmitis may follow as a possible contingency, into those in which the danger may be immediate or remote—immediate in all cases of recent wounds to the eye, especially when the ciliary region is involved, and when there is a foreign body in the eye. Remote when a disease process has been going on in an eye, and has involved the iris or the ciliary region. Whether an injured eye should be removed or not is often a most perplexing problem even to the specialists. In reaching a decision several points are involved upon which he lays great stress. (1) The amount of sight remaining. If the sight is lost the eye should be removed instanter, as any blind eye may become a source of danger at any time. If the sight is largely affected, unless it can be regained enucleation should follow. (2) The position of the wound. Any wound of the ciliary region, involving the iris, even wounds of the cornea near the sclero-corneal margin, are very liable to be followed by sympathetic inflammation. (3) When we have to deal with a foreign body the question is even more perplexing. There are recorded cases wherein the foreign body has remained in the eye for years with no perceptible ill results, but these are the exceptions. When the foreign body has penetrated the iris, ciliary process of choroid, or is lying upon the retina, enucleation is the only safe procedure. These are important facts, which, if remembered, would serve us all well in times of need, and, possibly, assist in saving many eyes.—*Canada Lancet*, March, 1892.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

Three Kinds of Favus.—UNNA says (*Fortschritte der Medicin*): Quincke was the first to ask whether more than one kind of favus existed. If it can be shown that there are several kinds, the clinical shortsightedness must have been great, for the unity of favus, a disease known for fifty years, had never been questioned. Assisted by Drs. Frank, Wiliams, Roberts and Douglas, Unna came to the conclusion that there are at least three kinds of favus, which he named as follows: (1) Faveus griseus, (2) sulphureus tardus, (3) sulfureus celerior. He describes the respective sentula as they appeared on mice. The corresponding fungi are as follows: Achorion euthythrix, dikroon and atakton. The experiments were carried out on the investigators themselves, on mice, on rabbits, etc. The mouse which falls a victim to favus is eaten by its companions, and the author considers this as the most likely explanation of the spread of the disease. From his experience, mere contact does not appear to produce the disease as frequently as he had thought on *a priori* grounds. Two of the foregoing kinds of favus have already been observed on mice in the free state.—*Journal American Medical Association*, March 19, 1892.

Gonorrheal Infection of the Buccal Membranes of New-born Children.—ROSINSKY (*Zeitsch. f. Gebürtsh. u. Gynäkol.*, 1891) records five cases of gonorrheal stomatitis in the new-born which came under his notice in the Royal Konigsberg Clinic. The following case is illustrative of all: On the thirteenth day after birth a baby, whose mother suffered from gonorrhea, exhibited on the roof of the mouth yellowish-white colorations, and on the tongue a plaque about the size of a three-cent piece. Next day the disease had progressed, and the affected parts showed a purulent formation; the surrounding mucous membrane being intensely red. By the fifteenth day the activity of the disease had passed, and on the tongue being drawn back, a piece of membrane very like diphtheritic tissue became loosened. Microscopical examination showed gonococci and pus cells. The symptoms gradually yielded, and by the 24th day no trace of the disease remained. In all five cases the symptoms were similar and the gonorrheal origin of the disease was clearly established by the microscope, and by the history of the mothers' infection.—*Schmidt's Jahrbüch.*, Bd. 233, No. 1.

Prolapse of the Female Urethra.—KLEINWACHTER observed the above rare condition in two patients. Believing such cases of great rarity, he was surprised in his search on the literature of the subject to find one hundred cases recorded, which he collected and arranged for study. His conclusions are that prolapse of the female urethra is not so rare as the medical profession generally believes. Its pathology is not clearly established, but age is an important factor. Children suffer most frequently, probably due to the peculiar topographical relations of bladder and urethra. Next to children, women in the the menopause are most affected, probably due to senile involution. Women in full menstrual life suffer least of all.—*Schmidt's Jahrbüch.*, Bd. 233, No. 1.

Prophylaxis Against Syphilis in France.—DUVERNET (*Bulletin de l'Académie de Médecine*, vol. lv, No. 24) has formulated a number of rules for the better protection against the spread of syphilis through hired nurses. Each year in Paris no less than 14,000 nurses are examined by the medical police with reference to their freedom from syphilitic taint. Of this number but 1,300 appear yearly for reëxamination, and here a flaw in the system is apparent. A nurse may at the time of examination show no sign of the disease, and yet syphilis may be present in a latent or in the incubative stage, where, having nursed a syphilitic infant and contracted the disease, time enough has not yet elapsed for the nurse to show its evidences. Both Duvernet and Fournier unite in the opinion that, besides more frequent examination of nurses, the nurslings themselves should be examined. In this way only will the spread of syphilis be hindered—a spreading which, in the France of to-day, is sufficient to be alarming.

Hereditary Syphilis.—JULIEN, at a meeting of the French Society for Dermatology and Syphilography, conducted a very interesting discussion on hereditary syphilis. He claimed that in 206 syphilitic pregnancies; 36 abortions, 8 still-born and 69 short-lived children resulted. Among the 93 children who lived the year out, only 43 could be said to be in a relatively healthy condition. Ferrar has seen a syphilitic child born after several healthy children from the same parents, and that this occurs where the parents, previously syphilitic, had taken in former years a thorough course of specific treatment. Julien concludes that proof is not lacking of the value, in previously syphilitic mothers, of a fresh course of treatment in each pregnancy. As to the cause of death in hereditary syphilitic children, almost all those present agreed that it was due in most cases to a meningitis of syphilitic origin.—*Semaine Médicale*, No. 17, 1891.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

Abortive Treatment of Pneumonia.—MOLINER says that, having regard to the microbic origin of pneumonia, it is reasonable to suppose that the disease can be aborted by treatment which can arrest the local evolution of the pathogenic culture. On account of the rapid development of the pneumonic infection, such treatment can be advantageously applied only within the first 48 hours of the illness. The fact that cultures lose their activity and virulence under the influence of a low temperature, suggest local refrigeration of the lung by the application of ice to the affected part, and by the inhalation of cold air, as a rational method of treatment. An essential adjuvant to the treatment by cold is pulmonary antisepsis, obtained by inhalations of "balsamic essences," and, in combination with these, oxygen, which is antagonistic to the pneumococcus, acts as a powerful antiseptic. As acid substances are also antagonistic to the pneumococcus, it should be surrounded by an acid medium. On these grounds Moliner proposes the following "abortive" treatment for pneumonia: (1) The application of ice to the part where the physical signs indicate commencing pneumonia. (2) Frequently repeated or almost continuous inhalations of cold air, oxygenated to the extent of one-third, and saturated with balsamic essences. (3) Rectal injections of sulphuretted hydrogen, sprays of acetic or lactic acid—perhaps inhalations of hydrofluoric acid and alcohol in small doses. —*British Medical Journal*, January 16, 1892.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

Motor Disturbances of the Stomach.—DR. CHAS. G. STOCKTON directs attention in this article to the question of gastric movements in the process of digestion. He refers to a common condition in infancy, when children frequently regurgitate milk soon after nursing, and this to such an extent that the child suffers from inanition. It is noticed that the milk returned is curdled and acid in reaction; the fault is attributed to an acid stomach, and alkalies are given, with consequent relief. It is probable in such cases that the stomach is not too acid, but rather that the cardiac orifice relaxes, and when the normal peristalsis of the stomach occurs, regurgitation of the food takes place. The effect of the antacid, lessening the stimulation to the gastric walls, is followed by a weaker peristalsis; the cardiac opening does not relax under the weakened pressure, and the trouble abates. A similar condition of affairs takes place in adult life, and many persons suffering from what they call sour stomach will, upon careful investigation, be found not victims of true pyrosis, but rather of weakness of the cardiac orifice, which permits too easy regurgitation of the stomach contents. It is to be understood that when the movements of the stomach are properly balanced, there may be sufficient stimulus from fermentation to produce unnaturally strong peristalsis, and hence regurgitation. In such cases the returned food will be very irritating, and will be accompanied by other symptoms than those of motor disturbance. In other cases it will be found that the gastric contents are excessively acid in reaction, and so irritating as to produce gastric catarrh, and yet regurgitation does not take place. In other words, the cardiac orifice once closed, fails to open to any degree of pressure from below. Hence, patients may suffer from sour stomach and not know it; and on the other hand, paradoxical as it may seem, may be actually free from pyrosis, while yet complaining of acid eructations. A patient may be reduced to the verge of starvation from the continued return of food, and this without any other apparent disturbance of digestion; without nausea, without vomiting—after the manner of the ruminant. Similar perversions are observed in the behavior of the pyloric orifice. Luenteric diarrhea is an instance of this perversion. Some patients complain that immediately after eating they are hurried from the table by an urgent desire to evacuate the bowels. Inspection of such alvine discharges, shows the food to be but little changed. As a result of this affection, nutrition fails. The ordinary remedies for diarrhea are attended with poor success, but remedies directed toward calming the peristalsis and strengthening the pylorus, if given before meals, will result in removing the difficulty. The cause of this diarrhea is a weakened pylorus. It occurs in neurotic individuals, the digestion of whom is without fault. In these cases there must also exist a similar disorder in the intestinal movements. In cases of incontinence of the pylorus, the food being rapidly expelled from the stomach, it is not sufficiently prepared for entrance into the intestines, thus creating duodenal indigestion and intestinal catarrh. On the other hand, the pylorus refuses to relax at the proper period of digestion and of time appointed by natnre. This latter condition may lead to dilatation of the stomach. There is also a want of gastric peristalsis, which often results in retarded digestion, and occasionally gastrestasia. The measures employed in the treatment of these cases consist in careful diet, regulation of the gastric stimulation, the application of electricity by means of the gastric electrode and abdominal massage.—*Medical News.*

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. Hoisholt, M. D., Assistant Physician, State Asylum for Insane,
Stockton, Cal.

A Case of Senile Chorea.—The following case recorded by Dr. Ferrier is a typical example of hemichorea occurring in advanced life, in which recovery resulted in spite of the complication of acute maniacal symptoms. Although chorea is essentially a disease of childhood or youth it may occur at the age of seventy and upwards and run its usual course in a few weeks or months. In other cases, however, chorea in the aged is associated with mental symptoms, either mania or dementia, of a chronic and incurable character, and the chorea itself is not uncommonly hereditary. Susannah G——, aged 70, was admitted to King's College Hospital January 23, 1891. She had always enjoyed good health, having only occasionally suffered from rheumatic pains, but never had acute rheumatism. One brother had suffered from rheumatism, but no member of the family had had rheumatism and chorea. Two sisters died of phthisis. In February, 1890, an attack of chorea developed gradually on her left side and lasted altogether two months, unaccompanied by any mental disturbance. About a month before the admission of the patient to the hospital a "severe bilious attack" set in, followed by gradually developing spasmodic jerkings of the right arm and leg. These symptoms were accompanied by great irritability of temper and sleeplessness. On admission the patient presented typical choreic movements of the right arm and leg and the right side of the face. The heart, lungs, and abdominal viscera were found to be normal. She was sleepless on the night of admission and on the next day became very excited, imagining that people were going to poison her, shrieking "police, murder, etc.," and struggling with the attendants, so that she had to be removed to an isolation ward and put into a strait jacket. Refusing all food and medicine she had to be fed by the nasal tube. After she had been given large doses of bromide and chloral she became less violent, but her excitement continued until February 16th when she was taken home by her friends, the choreic movements of the right side being at this time still present. She was seen by Dr. Ferrier at her home on March 13th and was found in the same condition mentally as well as regards the choreic movements. On April 8th the latter symptoms were much less marked and the excitement had almost gone, and at the end of April the patient was perfectly rational and free from all jerking. The treatment had consisted mainly of the administration of bromide of potassium, arsenic, and quinine.—*Lancet.*

The Degenerative Tendencies Transmitted by Drunkards to Their Children.—DR. L. GRENIER has studied this subject in 188 cases of alcoholism. The principal conclusions arrived at by the author are the following: The pernicious influence of inheritance attains its maximum when one of the parents is intoxicated at the time of conception. There is a marked inclination to excess in drink on the part of children of drunkards; about one-half of them become drunkards themselves. During early infancy the majority of the offspring of drunkards have convulsions. Epilepsy in children may be taken as presumptive evidence of alcoholism in the parents, provided it is not directly inherited from the latter, or is the indication of a neuropathic disposition of a whole family. The children of drunkards furnish an enormous contingent to insanity on account of their unstable mental state. The forms of insanity met with among them varying greatly. Alcoholic insanity is more frequent among the offspring of drunkards than among the parents themselves, which is an additional proof of intellectual degeneration.—*Gazette Médicale de Paris—Journal of Nervous and Mental Disease.*

A Singular Case of Self-mutilation.—DR. E A. MILNER reports the following case: An epileptic imbecile, aged 17 years, was found by his attendant in the ward lavatory bleeding from the mouth and with his fingers down his throat. When questioned as to what he was doing, he said he had gone for a drink but found he could not open his mouth. In order to do so he passed his fingers down his throat and pulled forcibly, when he felt something give way. On finding that he was bleeding he became frightened, and complained of "lock-jaw" when seen, but did not seem to have any difficulty in opening his mouth or swallowing. On examination after the bleeding had ceased, it was found that he had torn the soft palate almost completely away from its attachment to the fauces on the left side, exposing the tendinous fibres of the tensor palati muscle where they pass around the hamular process. Under appropriate treatment the wound healed rapidly; no swelling followed the injury to cause difficulty in swallowing or breathing, and there was no tendency for fluids to pass into the nasal cavity.—*British Medical Journal.*

Classification of Mental Diseases.—PROF. DÖRNBLUTH makes the following classification of the primary forms of mental disease: (1) Melancholia. (2) Mania. (3) Acute insanity ("verwirrtheit"). (4) Acute dementia. (5) Paranoia. (6) Periodical insanity. (7) Neurasthenic insanity. (8) Hysterical insanity. (9) Hypochondriacal insanity. (10) Epileptic insanity. (11) Acute delirium. (12) Progressive paralysis (dementia paralytica), (13) cerebral syphilis.—*Munchener med. Wochenschrift—Medical News.*

FORMULÆ.

By Geo. B. Somers, M. D., San Francisco, Cal.

Hair Tonic.—

Sulphate of quinine --- ʒ ss
Alcohol -------------- ℥ ii
Tinct. cantharides ---- ʒ i
Tinct. capsicum ------ ʒ ss
Ammonia water ------ ℥ ss
Glycerine ------------ ℥ i
Bay rum to make ----- ℥ vi

—*Pharmaceutical Era.*

Urticaria.—Quinquand (*Lo Sperimentale*) uses alkalies internally, or if they are not sufficient, arsenic or naphthol.

Externally:

Boric acid ------------ ℥ i
Chloral hydrate ------ ʒ iss
Distilled water ad. ---- ℥ vi

At the same time dust on the following powder:

Salicylic acid --------- ʒ iss
Oxide of zinc --------- ℥ ss
Starch ---------------- ℥ i

—*Lancet-Clinic.*

Oxalic Acid as an Emmenagogue.—Marsh considers this drug superior to other emmenagogues in certainty of action and in absence of disagreeable taste and irritant qualities. He prescribes:

Oxalic acid ----------- gr. xii
Syrup of orange peel -- ʒ vi
Distilled water ad. ---- ℥ iii

S.—Teaspoonful every four hours.

—*Médecine Moderne.*

PUBLIC HEALTH.

By W. R. Cluness, M.A., M.D., Sacramento, Cal.

Mortality.—The deaths registered in 119 town districts of the State during the past month, in a population of 823,321, correspond to an annual rate of 17.21 a thousand, the total mortality having been 1,181. 100 deaths were due to zymotic diseases, giving an annual rate of 1.72 a thousand. Of these, 42 were due to diphtheria, 19 to typhoid fever, 3 to remittent fever, 14 to scarlet fever, 12 to measles, 8 to whooping cough, and one each to diarrhea and dysentery, and cholera infantum. 332 deaths resulted from diseases of the respiratory organs, giving an annual rate of 4.44 a thousand. Of these, 191 were due to consumption, 90 to pneumonia, 4 to acute bronchitis, and 11 to pulmonary congestion, the rate being for consumption and pneumonia respectively, 2.78 and 1.31. 109 deaths were due to diseases of the heart. The average annual death rate from all causes, occurring in the ten largest cities and towns in the State, and representing a population of 555,900 was 19.15 a thousand. The highest rate for the month occurring in cities having a population of 10,000 or more inhabitants, was reported from San Francisco, the lowest from Stockton.

METEOROLOGY.

By J. W. Robertson, B.A., M.D., San Francisco, Cal.

Summary for March.—*Temperature.*—The signal service reports that in the extreme north the temperature was 1° to 4° above normal, while in Central and Southern California it was from 1° to 2° below. The usual average of 55° was practically maintained along the coast. Except in the extreme north and south, the temperature ranged between 50° and 55°.

Rainfall.—There were many cloudy and rainy days these constituting a majority of those recorded. There was an average rainfall of nearly three inches, all regions participating.

California—Tabular Statement for March, 1892.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	55.2	87.0	38.0	----	----	----	----	5.96	----	----	----	----	S.	Southern Pacific Company.
Berkeley......... "	52.8	77.0	39.0	60.0	46.1	13.9	12	3.60	83.0	12	3	16	S.W.	Obs. University of California.
Colfax............ "	45.0	76.0	28.0	----	----	----	----	6.75	----	----	----	----	S.E.	Southern Pacific Company.
Eureka........... "	48.6	66.0	36.0	54.3	43.0	11.3	13	5.32	91.0	5	7	19	N.	Weather Bureau Dept. Agr.
Fresno............ "	55.6	78.0	36.0	66.4	44.9	21.5	9	1.69	69.0	11	8	12	N.W.	" " "
Keeler............ "	53.5	75.0	32.0	63.5	43.5	20.0	4	0.32	41.0	17	8	6	S.	" " "
Los Angeles.... "	55.7	81.0	36.0	65.6	46.3	19.3	6	3.39	79.0	11	17	3	W.	" " "
Monterey .... "	54.0	82.0	40.0	----	----	----	----	3.05	----	----	----	----	S.	Southern Pacific Company.
Napa............. "	55.3	79.0	35.0	64.6	46.0	18.6	9	2.26	72.0	16	9	6	N. & S.	Station Napa Insane Asylum.
Oakland.......... "	53.3	88.0	37.0	6.26	47.3	15.3	9	2.89	85.0	9	13	9	S.W.	Chabot Observatory.
Paso Robles.... "	53.6	75.0	36.0	----	----	----	----	3.09	----	----	----	----	S.	Southern Pacific Company.
Red Bluff....... "	56.4	86.0	34.0	67.5	45.4	22.1	12	2.69	69.0	15	10	6	N.W.	Weather Bureau Dept. Agr.
Sacramento. ... "	55.9	78.0	37.0	65.9	45.9	20.0	9	3.02	72.0	17	8	6	S.E.	" " "
San Bernardino "	56.5	82.0	35.0	68.5	48.5	20.0	7	1.75	74.0	15	7	9	W.	A. K. Johnson, M. D
San Diego....... "	56.0	73.0	44.0	62.8	49.3	13.5	10	0.96	78.0	12	12	7	W.	Weather Bureau Dept. Agr.
San Francisco.. "	54.2	80.0	42.0	60.1	48.4	11.7	11	2.85	79.0	9	9	13	W.	" " "
Santa Barbara.. "	55.3	77.0	39.0	63.1	47.5	15.6	8	2.95	77.0	15	7	9	W.	Hugh D. Vail.
Santa Cruz...... "	54.0	76.0	41.0	----	----	----	----	2.74	----	----	----	----	S.W.	W. R. Springer.
Yuma..........A. T.	65.0	92.0	40.0	78.5	51.2	27.3	2	0.52	46.0	23	8	0	W.	Weather Bureau Dept. Agr.

Blank (----) indicates data missing.

Occidental Medical Times

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: MAY, 1892.

THE MEETING OF THE STATE SOCIETY.

The twenty-third annual meeting of the State Society may be regarded as a successful one, especially from a scientific standpoint. The methods of conducting the sessions and of arranging the programme inaugurated last year were continued and improved upon by omitting the evening session and condensing the day's work into two sessions, commencing respectively at 9:30 A. M. and 1:30 P. M. No hour was appointed for reports or papers, and every effort made to complete the business of each session before adjournment. This was a bold innovation, but it has proved quite successful in operation, and next year will, no doubt, work very smoothly. It will, however, always be difficult to keep the Society together and interested in prolonged sessions, and this task will devolve upon the Chair and the Committee of Arrangements. The stumbling block this year was the usual failure of the readers of papers to be present and ready when required. This difficulty must be met by careful preliminary work by the Committee of Arrangements to insure, before the Society meets, that all papers with or without their authors are ready for presentation. In this way only can a regular order of business be assured, and it is hardly reasonable for members to reach the meeting with papers "not yet finished."

The general character of the reports and papers presented was excellent, and the improvement shown last year has been maintained. This testifies to the good material composing the Society, as several of the authors have not, so far, been contributors. We believe the "stereotyped report," upon the absence of which the chairman of the Committee on Publication congratulated the Society, may be regarded as having disappeared, only one being presented this year. The majority of the writers had selected a distinctive title, while some few preferred to take more than one subject coming within the scope of their committee. THE PRESIDENT's address was concise and practical, dealing with subjects that concerned the welfare of the profession in general. The report of the Committee on Clinical Medicine, by DR. UTLEY, was both a practical and a useful paper. In California we are too much accustomed to vaunt the climatic superiority of our particular locality, and DR. UTLEY has set a good example by emphasizing the fact that no one locality is suitable to all varieties of pulmonary cases. The report of the Committee on Surgery, by DR. WILLS, is a valuable contribution in original research, for which there is a large field open. Space does not permit us to name others in detail, that are of more than average merit. The discussions were on the whole better than those of last year; but until it is possible to assure members that papers will be read according to programme, we cannot expect that the best results will be attained.

San Francisco was selected as the place of meeting for 1893. We regard this as unfortunate, as tending to a relapse into the former habit of the Society to gravitate there yearly. It is inevitable that the metropolis must always entertain the Society in a ratio far exceeding that of other cities, and this emphasizes the necessity of an annual change. The accession of members on this occasion was smaller than for many years, whilst in a new locality applicants readily come in who would not join at meetings held at a distance. It is also very noticeable that in San Francisco the attendance of the local profession is of the most meagre character, some members not even being present at a single session. In this section of the State, Fresno, San Jose, and Oakland are all able to take care of the Society, and in each city the membership is altogether out of proportion to the numerical strength of the local profession. We hope that next year a spirit of friendly rivalry will replace the present very general apathy, and that one of these cities will be selected.

It is inevitable that in every Society there will be cliques and factions, and equally true that their prominence militates against the general good. We have, so far two, "schools" in the Society, the University of Southern California having hitherto maintained a discreet and dignified silence, but we are now threatened with a third faction in the San Francisco Polyclinic. Where all are members of a common body, it would seem that outside considerations should have no influence, and that in the selection of officers the merit of the individual alone should be considered. The State Society is certainly not the place for warring schools and factions, or for professional jealousies, unfortunately too common in San Francisco. That no member of a "school" should be elected President is ridiculous, excluding as it would some of our best men; and it is equally absurd that any faction or factions should monopolize all the honors. A little reflection must convince any one of the folly and of the bad taste of interjecting elements of strife where harmony should prevail.

Dr. W. E. Taylor, of San Francisco, has been elected President for the ensuing year. As a man, Dr. Taylor is deservedly popular, while as a physician, he has always been found on the right side as an earnest advocate of good feeling, higher professional ethics, and the assistance of the unfortunate or the oppressed. In connection with the office of President there seem to be aspirants amongst the younger members. While the ambition to occupy a Chair that has been filled by the best men in the profession on this coast is a laudable one, there are several reasons why its achievement should be postponed. It has been the unwritten law of the Society for many years, that the presiding officer should be chosen from amongst the senior members. We have with us now some who may not be here in ten years, and many whom another decade will have removed from active professional life. The younger men, with many years of active life before them, should, therefore, in justice as in modesty, be satisfied to wait till they in turn had reached maturer years. In the selection of a Board of Examiners, the regular annual wrangle was not omitted. This recurring internecine conflict is deplorable, while the valuable time of the Society is wasted, and a great deal of hard feeling is engendered. There must be a new departure in this matter, and whether by amendment to the by-laws or by special action, this disturbance should be effectually prevented.

THE ENTERTAINMENTS.

San Francisco for many years has entertained the State Society, and always with a banquet. This year tradition and usage were abandoned, and the methods, so successful at Los Angeles and Sacramento, were to be given a trial. On Tuesday evening, April 19th, tickets were issued to all who desired them for the Alcazar Theatre. On Wednesday evening, the 20th, Dr. R. A. McLean entertained the Society at his new and handsome residence, corner of Pacific avenue and Devisadero street. The visitors, a large number of whom were present, were hospitably entertained.

On Thursday evening, the 21st, a reception on a large scale was given by the San Francisco Societies, at B'nai B'rith Hall. After a brief selection of vocal and instrumental music of exceptional character, the newly-elected President was installed. Dancing was then the order of the evening until midnight, when supper was served, arrangements having been made to accommodate all in the large supper-room attached to the hall. The collation was substantial and well served, and in this, as in other matters, it was evident that expense had not been spared. There was no wine on the table, but, unfortunately, evidence was not wanting that there was some in the building.

We have no desire to criticise, particularly in the face of a very apparent effort to render the occasion enjoyable, and of the fact that neither trouble nor expense had been spared. It seems, however, that a certain element pines for the olden days of the banquet-hall and its post-prandial festivities. To this element the refining influence of the ladies is an offense, and its absence a desirable consummation. If this element be a large one, then San Francisco had best return to her banquets; but if, as we believe, it be small and gradually becoming less, then a compromise might be effected by providing an entertainment "for men only" on one of the evenings.

BETTERED FACILITIES FOR THE TREATMENT OF THE CONVALESCING INSANE.

DR. GARDNER'S paper, an abstract of which appears in another column, is timely, and should attract wide-spread notice. It not only calls attention to a subject of vital importance to the people at large and to those administering the State's finances, but, by pointing out the mistakes that have been made, shows what is to be avoided in the future. He illustrates this by a reference to the asylum at Napa—a model of its kind—a building magnificent in its proportions, handsomely situated, and the one, above all other public institutions, where education and experience have been combined with honesty in properly conducting a public trust. This building was erected and furnished at a cost of $1,750,000, and, according to the original plan, could accommodate 600 patients. In other words, nearly $3,000 was expended for the construction of apartments for each patient, and the "apartment" consisted of a room 8 x 12 feet, and furnished with a cot. Even this great expenditure would be justified if the accommodations were such as best tended to the restoration of health and the proper housing of the inmates. But such is not the case. Instead of 600 patients for which the building was originally designed, over 1,400 are at present crowded in those rooms and halls. This has been made possible by furnishing attics which were never intended to be inhabited—wards, illy ventilated and worse sewered, where the summer sun heats the slated roofs, till the air becomes as hot and devitalizing as that of a bake-oven, while the winter winds and frosty nights add still more to the discomfort. But patients even here are palatially housed, when compared with those who occupy the wards beneath. The single rooms have been made to accommodate two or more, the alcoves are filled with iron beds, while the floors are strewn with straw bed-ticks; and, in passing through these wards at night, it is often necessary to step over or edge around the sleeping forms.

When it is remembered that all these patients are irresponsible, many of them noisy and filthy—disquieting to the ear and abhorrent to the olfactory sense—and that the homicidal maniac, the suicidal melancholiac, the savage epileptic, and the unreasoning paranoiac, are here herded together, no surprise need be felt that collisions are of frequent occurrence, and fatal casualties occasionally recorded. In so crowded an asylum, it is wholly impossible to properly segregate the curable and to surround them with that hygienic and moral atmosphere so necessary to mental recovery. For these reasons, instead of the 40 to 45 per cent. of recoveries that should occur, this—of all our asylums the model—can only record 28 per cent., while the average asylum life of the chronic insane has been reduced to four years. Such a condition of affairs may tend to benefit the State by increasing the death rate, but strychnine would be a speedier, though not a more certain agent, and the State could be held not a whit more responsible morally. But it is not altogether the fault either of the State's officers or the State's government. Above all others, California has responded generously to the appeals for those mentally diseased, as DR. GARDNER'S statistics show. No reasonable request has been refused, and all that money could do has been done. The only conclusion is that it has not been judiciously expended; the State has possibly been too generous. Take the asylum at Napa, for instance. This great expenditure was not the result of treasury-looting or State-robbing, but can be charged to the original plan of construction. Expensive ornamentation and the elaboration of details for beautifying, but not essentially adding to the comforts of the inmates, greatly increased the cost. An entrance on which was expended over $50,000, adorned with magnificent allegorical statuary, may be beautiful as a work of art and a proper entrance to the palace of a king, but it was not essential that so costly a portal should have been erected, through which the mentally sick were to enter what proves, to many of them, a living tomb. While this porch is in keeping with the general ornamentation of the building, it forms so strong a contrast to the squalor and misery to be found within, as to justify even a stronger protest than that raised by DR. GARDNER. But the great fault is with the plan of the buildings. Alienists agree that these magnificent structures, with spreading wings, are not so well suited for the care of the insane as are small, isolated cottages. Suitable cottages, containing ample accommodations, can be constructed at a cost of $2,000. Fifteen hundred patients could have been thus cared for at an expense of $500,000, with possibly another $100,000 for administration buildings, or a total cost of $400 for each patient. Even in the present over-crowded condition of the Napa wards, it has cost the State $1,250 for each inmate; in other words, 1,400 cottages, each costing $1,250, could have been built.

The Legislature of 1888–89 appropriated $30,000 for the erection of convalescing wards, but instead of expending it on simple cottages, two elegant buildings of brick were erected, in order that the symmetry of the palatial building they flanked would not be destroyed. Should DR. GARDNER's request be granted, we are satisfied this mistake will not be repeated. The urgency of relief, and the extent to which it must be carried, can only be appreciated by one who has seen, amongst the convalescing insane, every effort toward mental recovery thwarted by over-crowded, mentally depressing, and unsanitary surroundings, and watched the hopeless struggle of some father, the support of his house, or a mother whose scattered brood calls her, or the pride of some home, drift into chronic insanity, when better moral and hygienic surroundings would have restored them to mental health.

Our earnest effort, as a profession, should be put forth to correct this unfortunate state of affairs, and our sympathy and hearty coöperation should be extended to DR. GARDNER, who is taking this stand in behalf of the convalescing insane. He has proved himself both an able administrator and a humanitarian—a combination indispensable to the government of such an institution; and we are convinced that if proper encouragement be extended, and more suitable accommodations for the convalescent furnished, the increased percentage of recoveries, even from the financial point of view, will fully counterbalance any outlay. However, the good to be accomplished is higher than this, and farther-reaching, and, like the bread cast upon the waters, none of us know how soon it may be returned and be exemplified at our own hearthside.

NOTES.

The Report of the Supervising Surgeon-General U. S. Marine Hospital Service for 1891.

The report contains a financial statement of the condition of the service, the number of patients treated in hospitals and at the city dispensaries, and the work of its officers among seamen of the merchant marine and at national quarantine stations, besides their work as medical inspectors of immigrants. The service has, in fact, become the sanitary service of the whole country. The total number of cases of disease, etc., treated during the year, was 52,992, receiving 409,418 days of hospital relief, out of which number 488 died. The expenditures for the same period were $564,528.53, which amount was obtained from tonnage tax on foreign vessels. There are seven national quarantine stations operated by this service, three of which are located on the Pacific coast, at San Francisco, San Diego and at Port Townsend. That at San Francisco is in order for receiving and caring for contagious and infectious diseases and purifying ships; the one at San Diego is now in process of construction, and the site for a station at Port Townsend has but recently been selected by a board of officers appointed for that purpose. In addition to the interesting statistics contained in the report, there are a number of special cases of disease and injury, together with the autopsy record of deceased seamen.

California Academy of Medicine.

The San Francisco Medical Benevolent Society was inaugurated on the 21st day of December, 1870. At the first meeting preliminary to organization there were present S. R. Grey, L. P. Gautier, R. McMillan, A. P. Hogue, R. Mackintosh, W. H. Bruner, A. F. Sawyer, J. C. Tucker, and J. T. Crook. The preamble sets forth that the objects of the Society are "the protection and relief of deserving physicians or their families, and as far as may be in their power to promote kindly professional and social intercourse among themselves and their professional brethren at large." Among the constitutional enactments are found one requiring members to be graduates of some regular and recognized medical college, a provision for a relief fund, and one fixing the initiation fee at $20, and $2 monthly dues. The Society was regularly incorporated in February, 1871. The first President was Dr. R. McMillan, and the Recording Secretary was Dr. J. T. Crook. On the 26th day of September, 1891, the name of the San Francisco Benevolent Society was changed to the California Academy of Medicine. The Society now numbers about 50 active members. It has the nucleus of a fine library, subscribes for the best medical journals of Europe and America, and owns its own property, corner Bush and Van Ness Avenue, consisting of a lot and two story building. The upper floor is utilized by the Society as its general assembly hall, ante-room, library, museum, etc. The assembly hall is handsomely and appropriately furnished. The original papers presented during the past year bespeak interest and a high order of talent.

Christian Science in San Bernardino.

The case of the People *vs.* Mrs. Eliza Ward, in San Bernardino county, charged with manslaughter for having caused the death of George Lord, Jr., by gross neglect and want of ordinary caution and circumspection, has excited great interest in that section of the State. As already mentioned in these columns (MEDICAL TIMES, vol. vi, p. 95), Mrs. Ward was a "Christian Science Healer," and it was under her care as such that George Lord, Jr., died on December 14, 1891. The case was a most aggravated one. Lord was attacked with a violent headache, superinduced by the accumulation of pus in the frontal sinuses and ethmoidal cells, the pus finding its way into the orbital cavity, forcing the eye outward and downward about half an inch from its normal position; the pus also passed upwards, forming a sac above the left eye two and a half inches by one in depth. Meningitis supervened, resulting in death. Mrs. Ward had gained the confidence of the wife of the victim by assuring her that she could "bring her husband out all right" if he were placed in her hands. Accordingly the physicians, and all other persons who did not believe in Christian Science, were excluded. From day to day reports were issued that Mr. Lord was doing nicely and would soon be at work again. During this time, a period of five days, the victim was growing worse and all the symptoms were becoming more aggravated until death terminated the sufferings of the imprisoned patient, on December 14th. Two lines of prosecution were open: One for practising medicine without a license, the other for manslaughter. On the first count none of the revolting facts of the case were admissible in evidence, and nothing but testimony as to the fact of practising could have been admitted. The defense would, as usual, be that she did not profess to practise medicine, and that the case was one of persecution from the doctors. The second line of prosecution was followed and the facts of the case brought to light. Mrs. Davis, the Christian Science expert from Riverside, testified that "science" treated strychnine poisoning, the bite of a rattlesnake, small-pox, cholera and fevers alike. She denied that actual disease could be cured, but said that people only had "a belief of disease." She admitted that surgeons were needed in case of broken bones, but said that in the case of the deceased surgery was not admitted by "science" and that the half or two thirds of a cup full of pus that had accumulated would, by "science," be allowed to remain in his system. The case was skillfully prosecuted by District Attorney

Fording and John Brown, Jr. The elements of involuntary manslaughter were clearly proven. The Court charged the jury that if they found that the life of deceased had been shortened by reason of the gross carelessness of defendant that she was guilty, even though they might further find that when in his right mind the deceased consented to place his life in the care of the defendant. If the defendant had been a man he would have had no chance of escape. The defendant, however, was a woman; many ladies had stood by her through the entire trial, and had done everything possible to elicit sympathy, and when the jury retired, for fear they might "have a belief" that George Lord was dead and that Mrs. Ward was to blame for refusing him relief, a score of the "Scientists" bowed their heads and gave the jury silent treatment during many hours of its deliberation. After remaining out all night the jury finally returned a verdict of not guilty. The general sentiment in the community is that the defendant ought to have been punished.

SOCIETY PROCEEDINGS.

THE MEDICAL SOCIETY OF THE STATE OF CALIFORNIA.

Twenty-second Annual Meeting, held in San Francisco,
April 19, 20, 21 and 23, 1892.

FIRST DAY—TUESDAY, APRIL 19—MORNING SESSION.

The Twenty-second Annual Meeting was held in Union Square Hall; the Society being called to order by THE PRESIDENT.

Addresses of Welcome.—M. REGENSBERGER, of San Francisco, on behalf of the Committee of Arrangements, welcomed the Society. He said the preceding meetings of 1890 and 1891, two of the most successful ever known since the birth of the State Society, had been held in Los Angeles and in Sacramento. He wished to say, on behalf of the profession in San Francisco, that no pains, exertion or expenditure could make it possible to even compete with the royal hospitalities bestowed in those cities. The Society was there welcomed, not only by the men and women of the profession, but the citizens of Los Angeles, Pasadena, Riverside, San Diego and Sacramento, seemed to vie with each other in extending courtesies. He knew that the profession of San Francisco were with him in sentiment when he expressed their thanks, and welcomed the visitors most cordially. He hoped that they had come not only to labor, but also to refresh themselves, and ample provision had been made for both purposes. The speaker then mentioned the various social features that had been provided, and in which he hoped all would participate. There was a great deal of work before the Society, and the Committee of Arrangements would be compelled to adhere strictly to the programme, and to enforce the rules as regards time for papers and discussions.

The HON. G. L. SANDERSON, Mayor of San Francisco, on behalf of the city, said he had always had a sort of Oriental sentiment in regard to physicians. From his earliest childhood he had looked upon physicians as occupying a higher plane in the world than that occupied by ordinary people; that they were made of finer clay by the Almighty, that He might impress upon them their duty to the sick and sorrowing of this world. He had looked upon physicians as men endowed by heaven with superior qualities of mind and heart, because he knew how much they did for charity and to relieve the world of distress, often without any hope of pecuniary reward. Their only reward is recorded above. To his mind there was nothing that appealed so strongly to the sympathy of the people as the physician; wherever he goes his sunlight is with him. His reward may be but little, perhaps, in this world, but in the future he finds it. As the Chief Magistrate of San Francisco, and representing its people, he welcomed the Society, and wished the members would enjoy their visit there. He hoped that they would gather from each other knowledge that would be available in healing the sick, and that they would take with them to their homes many pleasant remembrances of the meeting in that city.

Annual Address.—The annual address (published at p. 225) was then read by the President, O. O. BURGESS, of San Francisco.

Committee on Publication.—G. F. SHIELS, of San Francisco, the Chairman of the committee, said its report might be considered as having already been brought before the Society in the preface of the published volume of transactions. While he was conscious that it contained many imperfections, he still felt that it at least compared favorably with those of former years. He would at the same time congratulate the Society on the greater number of valuable papers, and on the general and marked improvement that had followed the elimination of the stereotyped committee reports, which have now given place to stated papers.

AFTERNOON SESSION.

Indigenous Botany, Materia Medica, Pharmacy and Medical Chemistry.—W. P. GIBBONS, of Alameda, Chairman of the committee, read a paper in which he directed attention to several plants of California which possessed undoubted medical properties. Among them were Aristolochia Californica, Asarum Caudatum, Erythreæ Douglassii, and others, all of which have been partially tested and found to possess the same properties as species in the eastern States. He also dissected one of the numerous proprietary medicines, which is made up of eight plants, four of which are officinal and four not. Of the officinal ones two are comparatively inert, leaving but two of the whole which are of any value to the physician. The mixture is made up of a drachm of the fluid extract of each, and the dose is from a dessert to a tablespoonful three times daily. As usual with these preparations, it cures almost every disease. The average dose contains of each ingredient a small fraction over 11 ms. While this dose would be totally inert in seven of the ingredients, toxic effects would follow from the eighth. He also referred to the prevalent craze among pharmacists, to bring together new combinations of four or six well known drugs to form a good looking preparation, and obtain for it the endorsement of thirty or sixty persons, who attach M. D. to their names, and scatter it in all directions, in hopes that it will prove to be a bonanza to the proprietor. When physicians become unable to judge for themselves what therapeutic action they wish to establish, they had better retire from the profession. The speaker also alluded to the uncertain strength of some preparations, which is a serious obstacle to their use.

Pharmacy.—A. McG. STUART, of Santa Rosa, read a paper upon this subject. The speaker said the reciprocal relations of the pharmacist and physician were officially recognized, when the American Medical Association, in 1890, established a section of pharmacy and materia medica. In the progress of civilization pharmacy had kept fully abreast of other natural sciences. The improvement in each succeeding revision of the United States Pharmacopeia is one proof of this assertion, and this improvement was largely due to the division of labor between the physician and the pharmacist, the latter of whom had a majority on the last committee. The recognition of the importance to the pharmacist of a knowledge of microscopy is also to be regarded as an indication of progress. The detection of many adulterations in drugs was due to the familiarity of the microscopist with various individual elements composing the genuine root or plant. As additional indications of progress, and of the advantage to be derived from division of labor, the improvement in appearance and in potency of many of our medicinal preparations must be noted. The age of polypharmacy was past, and physician and patient alike demanded elegant preparations. In connection with the evils of the patent and trade-mark systems, the National Wholesale Druggists' Association had passed resolutions, calling upon Congress to protect the public against counterfeits of medical preparations. The question of the standardization of drugs or the establishment of an alkaloidal standard for liquid preparations of vegetable drugs, is at present eliciting considerable discussion among pharmacists and physicians, with the majority in favor of a process that can be readily applied. The reports of the various State Pharmaceutical Associations show the general tendency to encourage closer relations between the pharmaceutical and the medical professions. Our own State Pharmaceutical Association was largely imbued with this same spirit, and at its meeting in 1891 a resolution was passed to invite a committee of three from the State Medical Society to attend the session of the Association, to be held at Los Angeles, in May, 1892. Should the invitation be extended, the speaker trusted it would be accepted, and that the Society would be represented by men thoroughly imbued with the scientific spirit of the period. The speaker desired, in closing, to express her appreciation of the State pharmacy law, which, if not perfect, would certainly prevent incompetent druggists from continuing in business, and making mistakes in dispensing, which bring disgrace and discredit upon themselves and upon the medical profession.

Committee on Histology and Microscopy.—A. W. HOISHOLT, of Stockton, Chairman of the committee, read a paper on the plasmodium malariæ, illustrated by crayon drawings of the parasite. He said the discovery of this germ was an established fact, and one of the great achievements in medicine during the last few years. The name, malaria, though of comparatively recent origin, was known to the ancients as paroxysmal fevers. Even the modern view, that the disease is due to a living contagion, was expressed as early as 50 B. C. After mentioning the principal ideas brought forward as to the nature of the disease, from the time of Hippocrates to the middle of the present century, the speaker briefly alluded to the most noted germ theories and the character of the different microörganisms claimed by various investigators to be the cause of malaria: (1) Salisbury's unicellular alga, palmella gemiasma (1866). (2) Lanzi's germ ferment, identical with bacteridium brunneum (1876). (3) Eklund's fungus, limnophysalis hyalina (1878). (4) Klebs and Tommasi-Crudeli's bacillus malariæ (1879); and (5) Laveran's oscillaria malariæ, now known as plasmodium malariæ (1881). Since Laveran first published the results of his fundamental researches, many eminent investigators have corroborated his discovery and contributed largely to our knowledge of the parasite of malaria, having ascertained that the parasite attacks the red blood-corpuscles, lives and grows within them, and finally brings about a disintegration of them. Metschnikoff places the parasite among the gregarinæ and coccidia, sub-classes of protozoans. The germ of malaria has been subdivided by Celli and Marchiafava into three classes: (1) The ameboid form, or the plasmodium proper, which is round, unpigmented and intraglobular. (2) The pigmented form, which is of slow growth, undergoes the process of sporulation, and changes the hemoglobin into a fine granular pigment, causing atrophy and discoloration of the blood-cells. (3) The sickle-shaped corpuscle or cystic body of Laveran, which is sometimes round or ovoid, sometimes flagellated. This latter form is very resistant, and is not made to disappear on administration of quinine, while the plasmodium proper is affected by it; only the crescent bodies, where these are present, as in the chronic and pernicious forms of the disease, and a few adult, strongly pigmented cells, can be detected after administration of this drug, which should be given during the twelve hours immediately preceding the attack. The following color-test of Romanowsky was considered by the speaker as the best for the demonstration and study of the phases of the parasite: After taking the proper precautions in removing the blood from the tip of the finger, it is fixed on cover-glasses and heated at a temperature of 105° to 110° C. for about half an hour. The cover-glasses are left for twenty-four hours in a neutral solution consisting of a mixture of equal parts of half per cent. aqueous solution of eosin and a saturated aqueous solution of methylen blue, diluted one half with distilled water. Romanowsky examined the blood in this manner in fifty cases of different diseases not malarial, and in health, without being able to detect anything resembling the plasmodium. The investigator has recognized by the above method a protoplasm and a nucleus in the parasite, and has detected a karyokinetic metamorphosis in the latter, introducing the process of sporulation.

A number of observers claim that there are different forms or species of the parasite, and that the periodicity of intermittent fevers corresponds to the life-cycles of the different forms of the parasite. According to the speaker, the plasmodium proper is the form which is most frequently observed in malarial cases. Dr. G. Dock, of Texas, observed it in twenty-six out of thirty cases. Attempts at cultivation of the malarial parasite have so far failed, which may perhaps be accounted for by its being a protozoan, and not a bacillus or coccus. Mattei, an Italian experimenter, has, however, succeeded in reproducing a malarial infection of the same type by intravenous injections of blood containing a particular variety of the malarial parasite. After quoting cases illustrating the great clinical import of the germ of malaria in differential diagnosis, the speaker concluded by saying that in view of the general recognition of the germ of malaria, the blood of patients presenting malarial symptoms ought to be examined as a matter of routine, just as the sputum is now being examined for the germ of tuberculosis.

Dr. J. H. Wythe, of Oakland, said he did not know why he should have been selected to open this discussion, unless it was that two years ago, at Los Angeles, he presented some drawings of microscopical observations of the blood cells that he had made, and those drawings resembled, in many respects, these of Dr. Hoisholt, now before the Society. He was glad that this subject of blood investigation is being agitated by microscopists. We are beginning to find out that there is something else than tubercle bacilli. He was not yet prepared, however, to give unqualified assent to the plasmodium malariæ. With some other investigators, he was inclined to believe that the different forms here represented can be explained by degenerative changes in the red blood corpuscles themselves. He had been making, for years, a series of experiments upon the red blood corpuscles, with the very highest powers of the microscope. By the courtesy of Powell & Leland he had been enabled to get, perhaps, the very best glass ever invented, containing an immense numerical aperture of $1\frac{5}{10}$ inches. The blood should be examined with high powers, not less than 2000 diameters, for with less than that it was perfect folly to examine it. The blood of almost any of us will show changes very similar to what is shown here. He had examined blood in various cases, in a number of diseases, of which he had already given the Society the results. Among others, he found, that in a case of malaria the serum of the blood has a curious faculty of dissolving these things altogether. He thought we were upon the eve of great discoveries, and particularly in this direction. The investigation of the red blood corpuscles will open the eyes of the world for the higher powers of the microscope. For his part, he had never yet seen what he considered properly a plasmodium, yet the representations given by Golgi and others correspond so accurately with the observations he had already brought before the Society, that he was led to believe, with the Italian observers, that the plasmodium is nothing but a degenerative change in the blood corpuscles.

Dr. Hoisholt: It is possible that what Dr. Wythe says is true, that what is here represented may be nothing but changes in the blood cells. There is one thing that I do not see how Dr. Wythe can explain; that is, that this investigator, Romanowsky, whose observations were published last September for the first time, has been at work at this subject for several years, and has succeeded in finding a method by which he can detect a change in the nucleus or so-called karyokinetic metamorphosis. That change in the nucleus, the subdivision, is partly represented here; the whole change is not represented. That only occurs, as I think Dr. Wythe will admit, in the white corpuscles and cells, and not in the red corpuscles. If it does not occur in the red corpuscles, how are we to explain these changes in the red corpuscles unless it is due to some substance from without—some organism, some cell, which is characteristic of cells only; and if the blood cell does not do it, it must be some cell that is inside of the blood cell.

Dr. Wythe: The point is very well taken, I do not deny that there are causes for all these changes, but whether we have found them or not, is a question.

Committee on Pathology and Pathological Anatomy.—D. C. **Barber**, of Los Angeles, Chairman of the committee, said that no very startling new discoveries had been made in pathology during the past year. From the morbid appearances of disease, observed and described during that period, he selected some that were of interest. Chronic pancreatitis with disseminated fat necrosis has been studied by various observers. This change, when abundant throughout the organ, was sufficient to produce complete cessation of function. It appeared to occur chiefly in the aged, and it was suggested that the accumulation of fat might be a valuable symptom of disease of this organ. Regarding the influence of pregnancy on epilepsy, Dr. Guder has drawn the following conclusions: (1) That epileptic attacks were, as a rule, absent during pregnancy, but that they were almost certain to make their appearance during and after the puerperal period. (2) That the offspring of epileptic women were predisposed to the disease, and as far as possible should be persuaded from marriage. Binet has isolated a substance from human urine that, when inoculated in guinea pigs, produces a rise of several degrees in temperature. It is invariably found in the urine of tuberculous persons, and in other pathological conditions, but slightly in normal urine. Tuberculous animals are especially sensitive to its influence, which, in healthy animals, is less regular and intense. Later investigations seem to show that the so-called cancer microörganisms of Russell were not microörganisms at all, and even if so, they could not be regarded as characteristic of cancer. Two specimens of uterine myoma, one of syphilitic lung, a case of phthisis consolidation and two specimens of normal mammary gland, under the same conditions, yielded precisely identical bodies. The author discussed the morbid anatomy of inebriety in an exhaustive manner, and alluded to the observations of Dr. McKenzie, of the Brompton Hospital in London, on autopsies of alcoholics in which tubercular lesions had been found. Of 75 cases examined, 67 had the lungs principally affected. In only 10 of the 75 was there any hereditary taint. In many of the cases for some time a diagnosis could only be made by examination of the sputum, the main symptoms being masked by hepatic and nervous manifestations. This observer lays great stress on the importance in all cases of marked alcoholism, where expectoration was present, of examining the sputum, even when the liver or nervous system seem to be the part affected.

Dr. J. C. Spencer, of San Francisco, said there was one matter of interest in connection with pancreatitis with fat necrosis. In a paper by Dr. Welch, of Johns Hopkins University, a year or two ago, a case which came to the *post-mortem* table, of pancreatitis showing numerous foci of fat necrosis, cultivations made from these by means of gelatine plates, etc., demonstrated that the bacterium coli commune was found in each one of these foci, and was presumably the cause of the pancreatitis. On the subject of cancer and microörganisms there seemed to be very little that was definitely settled. A year or two ago Thoma, of Dorpat, thought he had discovered a microörganism that was the cause of cancer. This appeared to be one of the higher grades—something on the order of the plasmodium malariæ—and was described as a coccidium. Ribbert, of Bonn, who took the matter up, found, or thought he found, that these appearances were not organisms at all, but degenerative changes in the cancer cells which resulted in the formation of vacuoles. Regarding the pathological lesions of inebriety or alcoholism, his experience had been drawn largely from cases from the alcoholic cells in Bellevue Hospital, New York. He had occasion to make numerous autopsies there of patients who died from acute alcoholism. The course of the various cases was different in regard to the length of time, but as a rule the subjects suffered from what we called wet brain—that is, effusion of serum, with cloudiness of the pia mater, and sometimes pachymeningeal hemorrhages. If the case ran any prolonged course, it was usually found that they suffered more or less from peripheral neuritis, and these changes were generally in the parenchyma of the nerve fibres, and resulted in a degeneration and consequent lesion. He took occasion to urge a more lively interest in pathological matters. It was very much more satisfactory to get hold of pathological material to confirm a diagnosis. In private practice it was not always possible to receive permission to make an autopsy, but in every instance where it was possible we should insist upon it if the patient's friends can have their prejudices overcome by a little persuasion.

What is Needed to Make Our Therapeutic Use of the Mineral Waters of California More General and Practical.—H. M. Pond, of St. Helena, read a paper upon this subject. He assumed that our mineral waters had a decided and definite therapeutic value. The chemical similarity to European spas of established repute, left no reasonable doubt of the fact, while the testimony of the aborigines who use them empirically, added confirmation. He did not believe that the benefit in chronic diseases obtained from a visit to a mineral spring, was due in greater part to change of air and scene, though these were unquestionably valuable aids; but rather that the therapeutic influence of the water was the chief remedial agent. Were this not so, it would be needless to consider the chemical composition and therapeutic action of the water. It was necessary to discriminate between springs, and the public needed instruction in this matter. Before visiting a spring, the patient should consult his physician, and be directed to that one suitable to his individual case. The profession also needed instruction in this matter, and it should be qualified to give an intelligent opinion upon the subject. This could only be accomplished by studying chemical analyses of the various springs. Mineral springs, with which Nature had endowed California, were not the least important of her natural resources, yet, as far as he was aware, the subject had never received any State aid or encouragement. An appropriation by the Legislature, expended under the supervision of the State Board of Health or the chemical department of the University of California, or other competent authority, in careful analyses, the collection of authentic results of the use of the various springs, and the wide dissemination of this information, would be a remunerative investment. The owners of health resorts should be awakened to the fact that the profession recognizes the mineral springs as important remedial agents, and proposes to regulate the choice and method of their use. No one spring was a "cure-all," and the shortest way to permanent success, was to define those ailments which it was calculated to benefit. A resident medical adviser was a necessity, and it was ridiculous to send a patient to a watering place without knowing that he would be provided with skilled advice and attention. All things being equal, the profession should discriminate in favor of those springs where medical men were regularly employed, and encouragement should be given for the compilation and preservation of clinical records. In this connection, he suggested that it would be better if the medical officer was provided by the State authority, thus insuring his independence. He believed that by the adoption of some such means, California's comparatively unknown springs would soon rank with those of European celebrity, when aided with the rich gifts of Nature with which we were here surrounded.

Dr. James Simpson, of San Francisco, said he agreed thoroughly with all Dr. Pond had said regarding the mineral springs of California. He had no doubt that in this State there were mineral springs equal to any in Europe, and when we see, as Dr. Pond has pointed out, how those waters are used and drunk, each person pursuing his own course, at liberty to do as he pleases, and yet observe the wonderful effects which they at times produce, it shows there are springs in California well worthy the attention of the public, to say nothing of the profession. The doctor called attention to the manner in which the mineral springs of Europe are managed. At Carlsbad and other large resorts the food and almost the very air a person breathes is measured by a municipal ordinance, and no one is permitted to sell food, drink, or anything else unless ordered for the patient by the physician. Everything is managed in such a way that those springs are utilized under the intelligent direction of the profession. Here each one does as he pleases. Dr. Pond had taken a step in the right direction. Unfortunately the average legislator will seldom come up to the point of assisting the public to obtain health. He frequently thought that if they had any designs upon the public it was for their own benefit and not in the interests of the public. There was an effort made some two or three years ago by the State Board of Health to accomplish something in regard to their sanitary condition, so that the accommodation would be such as the best sanitation would give. At present at most of the springs, after the long winter months have passed and the first crush of the public, occupying, say a month or six weeks, is over, during the balance of the season there is too frequently no sanitation, in fact nothing that would contribute to health except the pure atmosphere and the springs; yet notwithstanding all this they were beneficial.

Dr. D. E. Barger, of San Francisco, thought that what was needed more than anything else was a sanitarium at one of these springs. We had a great many springs in this State, but there was not a place in the whole State where you could send a patient with the assurance that he will be properly taken care of. It is not the fault of the medical profession; it is the manner in which the springs are conducted. If physicians would interest themselves, invest some money, and establish a sanitarium at one of these springs, we would have an institution where we could send patients. A number of these springs have valuable medicinal waters, but there is no means of treating patients properly. Diet is one of the principal things to be considered, and at all of these places the diet is suitable only for well people. So far as the springs at present were concerned they did a great deal of good, and the people that were conducting them try to do the best they can, but there is no system at any of them.

Some Points in the Treatment of Obstruction of the Bowels and Retention of Urine.—C. W. NUTTING, of Etna Mills, read a paper upon this subject, illustrating it by reporting several cases. The first was that of a man aged 30 years, attacked by vomiting and obstinate constipation, with abdominal pain, but without fever. No local cause could be made out. A large dose of calomel was given, with codein, for the relief of pain. The following day, as no relief had been obtained, copious enemata of warm water, with a Davidson's syringe, were tried, but without effect. The long tube and direct hydrostatic pressure was then employed, and also failed. The dose of codein was increased, and on the following day a common rectal nozzle was attached to a rubber tube and connected with an air condenser, and within ten minutes a copious evacuation of the bowels occurred. All the symptoms promptly subsided. The speaker had been unable to satisfy himself as to the precise nature of the case, but had ascertained that the patient had previously had similar trouble. In the case of a child 18 months old suffering from well-marked intussusception, apparent relief was obtained by copious rectal enemata of warm water, the tumor disappearing. The following day, however, the symptoms had returned, and inflation of air, as already described, was tried, with immediate relief. This only lasted for two hours, but by again using the air, and pushing it until the whole intestinal canal had been distended, the trouble disappeared, and had not since recurred. In a third case, that of a woman aged 60 years, suffering from strangulated femoral hernia, which taxis had failed to reduce, inflation was tried, but though pushed until eructations from the mouth occurred, there was no change in the hernial tumor. An operation was performed, and on opening the sac it was found to contain omentum, the protrusion being reduced with great difficulty. This explained why the inflation had failed. Retention of urine was a complication that might at any time confront the practitioner, and it was always difficult to relieve these cases, and sometimes impossible through the natural channels and with every mechanical facility. In these cases he believed supra-pubic aspiration was a harmless procedure. He had satisfied himself of this on many occasions, and had also observed that when the bladder had been relieved it was often possible to introduce a catheter as complete rest to the parts, and relief from unavailing straining efforts had been obtained. He did not regard this operation as a last resort, and preferred to employ it where great difficulty was experienced in the introduction of the catheter. Under cocaine he introduced a medium-sized needle, having attached to it some rubber tubing, in the median line above the pubis. The urine was thus syphoned out. There was no danger of air entering, but an aspirator could be attached if desired. He believed that this procedure would, in cases of operations upon, or injuries to, the urethra, replace perineal section.

DR. W. F. MCNUTT, of San Francisco, said the method of overcoming the obstruction by dilatating the intestines by air, while not new, is sometimes safer than any other; safer than the use of water or gases. He had tried chloroform vapor or air charged with chloroform. He had never seen this method of diagnosing hernia before, but thought it most excellent and thoroughly practicable. Whether we could reduce the hernia by it is another question; but he thought if it were investigated it might be found a practical method for effecting reduction he would resort to it if the opportunity occurred. There were, of course, obstructions of the intestines, in which it would not do; adhesive bands, for instance. He had had an interesting case sometime ago, where he dilated the colon with water, and allowed a large calculus that had found its way into the intestine from the gall-bladder, to pass. The gall-bladder had become inflamed and adherent to the colon, and the large stone ulcerated through the colon and stopped there. The colon had contracted upon it and produced a complete obstruction. In this case he had overcome the obstruction by water, but he thought it very likely that it would have been better done by air. As for the aspirator in retention of urine, he had used this instrument in all directions, and quite agreed that it was a harmless procedure. It can be introduced into the bladder or liver and used to puncture the gall-bladder. He never found any difficulty or any serious trouble following the use of a fine needle. He thought the suprapubic method was better than that by the rectum.

Dr. R. A. McLean, of San Francisco, said he entirely coincided with the use of the aspirator in relieving the bladder, although it had usually been his custom to tap by way of the rectum. There have been a few cases on record of peritonitis from inserting the aspirator at too high a level, but that is probably a preventable accident. The cases in which it may be used to advantage are those where tapping by the rectum would be impracticable, for instance, in cases based on inflammation of the peritoneum, where a great amount of swelling exists, the swelling protruding into the rectum as well as against the neck of the bladder. His experience, however, had been mainly by tapping by the rectum.

Bichloride of Gold Treatment.—Dr. M. Schnabel, of Newcastle, invited a short discussion under the head of therapeutics, on the treatment of alcoholism, stating that, as the question of acute and chronic alcoholism is one that has been exciting attention through the public press, he was in hopes the matter would be brought up in some way before the Society. The bichloride of gold treatment had attracted the attention of medical men generally. He mentioned the case of an Englishman who was sent to this country for the benefit of his health, whom he had been called to attend. He found the patient boisterously drunk, in which condition he had been for about four weeks. He drank two large champagne bottles full of whisky every twenty-four hours. His pulse was about 120, the temperature ranging from 100 to 101° F. He had hallucinations, and carried on conversations with imaginary persons close by him. The speaker could do nothing with him. He commenced by injecting strychnine hypodermically, $\frac{1}{5}$ gr., increasing it by degrees, but could get no satisfactory result. He gave chloral hydrate at different times, but nothing would make the patient sleep more than half an hour at a time, and every day he suffered from hallucinations. As a last resort he tried the bichloride of gold, commencing with $\frac{1}{20}$ gr., injected hypodermically between the shoulder blades twice a day, morning and evening. He discontinued his visits at the end of ten days, at which time he was giving $\frac{1}{10}$ gr. daily, and still continuing the injection of strychnine ($\frac{1}{10}$ gr.). Patient said he could not discontinue the use of alcohol, though he despised the taste of it. He said: "I despise the taste of whisky—can't you give me champagne?" The next day he resorted to the use of champagne, and, when the speaker again saw him, said: "I don't like champagne." In answer to the question why he drank it, he said: "I have a sinking feeling here in the pit of the stomach and heart, somewhere, and I have to take something to brace me up; if I don't I will die in less than a minute." Treatment was continued until about ten days ago, when the patient said: "I fight against it; I have a desire still, but I fight against it." He has now been one week without a particle of alcoholic stimulant, and he is taking the bichloride of gold, $\frac{1}{10}$ of a grain morning and evening. For four consecutive days he took $\frac{1}{10}$ of a grain three times a day. He says he still has a slight desire for the taste of liquor, but he can fight it off easily. The fact that he resisted the temptation to drink is borne out by his wife, who says she has not given him a particle of alcohol for over a week, and so far he has done very well.

Dr. G. F. Shiels, of San Francisco, thought the subject very important. He regarded the treatment of alcoholism by drugs as one of the greatest farces that has ever been perpetrated. It is a peculiar fact that the human race are given to appetites for all kinds of excesses, and if these do the individual harm, it is only by an intrinsic examination of himself that he is able to correct them. Medication may go a long way, but it does not medicate the psychological condition of the individual. If he wishes to do something, you cannot give him a quarter of a grain of a certain drug to make him wish not to do it;

you cannot inject underneath his skin a solution of any therapeutic agent which will make him say that he will not. If he drinks to excess, he will continue to do so, unless his power of brain is sufficient to overcome the desire. His surroundings will influence his brain; the only way to treat alcoholism in any person is to make the surroundings of the alcoholic such that they will aid him in overcoming the desire. How often do we see a young man who is given to the excessive use of alcohol, fall in love with a young woman, who influences him to stop its use; or an affectionate son who, under the influence of a kindly father, working upon that which medicine cannot work upon—his soul—will refrain from this abuse. The whole thing is a foolish, unscientific and ridiculous proposition, which will never be followed by any good effect, and which will bring the medical profession before the public as a laughing stock.

Pulmonary Atelectasis as a Cause of Anemia.—**ALBERT ABRAMS**, of San Francisco, read a paper upon this subject, in which he showed by accurate observations, supplemented by measurements of hemoglobin and the red blood corpuscles, that atelectasis of the lungs is a frequent factor in the etiology of anemia. He enumerated the symptoms of anemia of pulmonary origin based on the observation of 25 cases observed in private practice. Improvement in these cases was noted after the inhalation of relatively compressed air by means of the pneumatic cabinet. He believed, however, that no special apparatus is required if the patient is taught to make repeated forced inspirations. The following conclusions were formulated: (1) Physiological atelectasis of the lung is a frequent condition. (2) It may be readily diagnosed by the presence of circumscribed areas of lung dulness, which disappear after repeated forced inspirations. (3) Physiological atelectasis of the lung is frequently associated with anemia. (4) In all cases of anemia of obscure origin examination for atelectasis of the lung should be made. (5) Anemia, due to physiological atelectasis, may be cured after inflation of the lungs. (6) Forced voluntary inspirations are an excellent substitute for inhalations of pure oxygen, and are of great value in anemia from whatever cause.

DR. JAMES SIMPSON, of San Francisco, inquired if the author would state more explicitly what he considered the various causes of atelectasis?

DR. ABRAMS, said he could not attribute atelectasis to any particular condition, other than that we did not use our lungs as we should, and that our present modes of life were perhaps insufficient to render the lungs sufficiently developed. He knew of no particular cause.

DR. W. F. MCNUTT, of San Francisco, said that he did not believe we had such a thing as physiological atelectasis, or such a thing as physiological degeneration, or that we have dulness from atelectasis; there may be a little flatness; there certainly is. Where there is dulness there is an exudation, either fibrous or mucous, and, as the air-cells are filled, the lung becomes solid. The mere collapse of the lung cannot be physiological. The weakened condition of the lung may allow it to collapse; we see this in emphysema; the air-cells give way from nutritive degeneration, and they dilate and coalesce, and large cavities form in that way. We have the same thing in anemia, a weakened, degenerated condition of the air-cell or of the small bronchi, where it may collapse. Larger tubes will never collapse. If there is any considerable atelectasis, then it is owing to the obstruction of the large tube and not to its collapse. In many of these cases where there is simply a partially collapsed condition of the lung which might be called atelectasis, we have an edema of the lung; we have weakness and exudation. The moment you dilate the lung and expand it a person will expectorate, and the mucus in the lung is removed either by absorption or by expectoration, and in a little while you will find the lung where it was, flat, or perhaps normal. Inspirations will dilate these lungs; but that was not, to his mind, by any means, a physiological condition, and certainly not physiological atelectasis.

DR. G. F. SHIELS, of San Francisco, said it was undoubtedly true that a man fills his lungs better at one time than at another, and that there are times when the lung is not quite so full as it is at others; but there were some things brought up in the paper which were of terrible import. Dr. Abrams told us that nasal stenosis was a cause of anemia. The speaker feared that the human race were all pretty much subject to anemia, if that were one of the causes. He doubted very much whether there was any individual who had not more or less narrowing of his nasal passages. He did not think we could attribute anemia to a thickening of the mucous membrane of the nose and obstruction of the passage of air through the nasal passages, and he would like Dr. Abrams to explain how he brought about the connection. The author spoke of cachexia, due to cardiac disease. As he understood it, cachexia meant a loss of nutrition, a general pallor and weakness and loss of strength. It seemed to him that in most cardiac diseases the patient does not show any such cachexia until a very late stage of the disease; in fact, as a rule, cardiac trouble is found out more by accident than by cachexia. He would like to have Dr. Abrams explain what he means by cachexia of cardiac disease, and anemia, following nasal stenosis.

Dr. Simpson, of San Francisco, said that patients often came to him with dulness of one lung and other contributory symptoms, all pointing to incipient phthisis, and that he found them getting well, as Dr. Abrams had said, and not verifying his prognosis. There is nothing that places one at such a disadvantage as the making of a wrong prognosis. He recognized the condition described by Dr. Abrams, and had for years, perhaps, without a satisfactory explanation. We all know that one of the first appearances presented by any one with a cardiac lesion is almost certain to be anemia; we all know that when the lung is not properly oxygenated we very soon have anemia; call it cachexia, or what you will, we have an anemic appearance. The treatment should be such as to place the materials of the body of every kind in such a shape that they will assimilate and digest and manufacture nutriment into healthy flesh and blood. We give iron, we give tonics. He had occasionally used oxygen in such cases with a great deal of advantage. He recognized the condition described by Dr. Abrams, and was never more interested than in the description that he gave of atelectasis.

Dr. Shiels, of San Francisco, said he had no intention of belittling the paper, but he intended to say that you do not have anemia as an early symptom of valvular disease of the heart; you do not have cachexia. He did not believe that nasal stenosis was a cause of anemia.

Dr. McNutt, of San Francisco, said that the pathological condition of the lungs from heart disease was entirely owing to the valves involved. With regurgitation of the mitral valve we very soon have obstruction of the lungs, and dulness; very often dulness. In chronic regurgitation we have a constant passive hyperemia of the lung. An autopsy will show a brown induration. He did not suppose that where you have mitral regurgitation, or constant bronchitis, or constant mucus in the air-cells, that it was anything else but hyperemia that was obstructing the lung. We know very well that stimulants to the heart's action, unloading of the portal circulation, giving iron and such remedies as will benefit the patient, will clear up the lungs, but certainly the pathological condition of the lung was not atelectasis, but hyperemia. He had numbers of these pathological conditions of the lung every day, and of that chronic condition called brown induration, where the lung has become so hyperemic that the blood vessels are apt to rupture, and you will find the coloring matter of the blood absorbed. You will find a thickening of the walls of the air-cells in those cases, and a secretion of mucus constantly obstructing the air.

Dr. A. W. Perry, of San Francisco, said, regarding nasal stenosis as a cause of anemia, he had made some observations in children, and found quite a number of cases having enlarged tonsils, causing obstruction of the air passage, not only of the mouth, but occasioning indirectly an obstruction of the air through the nasal passages. This produces anemia. He prescribed remedies calculated to reduce the tonsils. He could very readily believe that nasal obstruction to any considerable extent will cause anemia, and would go further, and say that he believed that almost any obstruction to the passage of air into the lungs will occasion anemia very quickly, and anemia which could not be removed by any therapeutic measures outside of relief of the obstruction.

Dr. Abrams, in replying, said that dulness certainly exists in atelectasis; flatness does not; there is a decided difference between dulness and flatness; flatness is a high degree of dulness. With reference to physiological atelectasis, he had particularly referred to it as physiological, for the reason that it was not due to compression; it was not due to causes which produce serious organic disturbances, or serious organic changes in the lung tissue. That physiological atelectasis exists is unquestionable. We need only refer to cases of long-continued illness, such as typhoid fever, where the patient lies in a recumbent posture for a long time; the lungs show dulness every time, and this dulness is removed after repeated deep, voluntary inspirations. This is a fact well known to us all. If the patient is not told to make deep inspirations, the dulness continues, and the physician errs in his diagnosis. He must necessarily refer in his case-book to a dulness of the lungs, but this dulness absolutely disappears after a deep inspiration. Every individual, however well, shows physiological atelectasis; every individual's lungs would become more resonant after deep inspirations, however resonant they may have been before the examination; in other words, that physiological atelectasis exists in every case. He wished to show, in his paper and in his observations, that many obscure forms of anemia were of pulmonary origin. It is as well to attribute anemia to the lungs as it is to attribute it to feculent matter in the intestines, and to many other causes which have lately come into the literature of medicine. Dr. Shiels' remarks seemed rather singular in the light of actual observations. Every medical scientist knows that all pre-thought regarding observations of medicine count for nothing alongside of scientific investigations. In referring to nasal stenosis as a cause of anemia, he merely recalled the very accurate observations of Holbrook Curtis, who investigated cases of nasal stenosis and found, as an absolute fact, that anemia existed; he made blood measurements, and counted the number of corpuscles. Dr. Holbrook also found that when this obstruction was removed, the anemia disappeared. In these cases, the nasal obstruction simply led to insufficient respiration. The speaker stated that when he referred to the cachexia of cardiac cases, he meant patients in whom there were disturbances of respiration, not to valvular cardiac lesions in the earlier stages, but only after circulatory stasis occurred in the lungs. He maintained that this stasis leads to a compression of the air-vessels with consequent insufficient entrance of oxygen into the blood, and thus anemia is produced. He affirmed, and was ready to substantiate, that the appearance of the individual with cardiac cachexia improves after repeated voluntary inspirations. In these cases he had used compressed air, but whether the same results were achieved by voluntary inspirations on the part of the patient he was unable to say.

SECOND DAY—WEDNESDAY, APRIL 20—MORNING SESSION.

Committee on Obstetrics and Puerperal Diseases.—The report of this committee (published at p. 247), was read by the chairman, G. P. REYNOLDS, of Alameda.

Fracture of the Ischium During Labor.—T. A. DAVIS, of San Diego, reported a case of this unusual accident. It was so rare that he had, in the literature at his command, been able to find only three cases. The present one occurred in a small boned, slender anemic woman 31 years of age. On the ninth day after delivery the patient, who was suffering from a lacerated perineum, with incipient crural phlebitis, complained of pain in the laceration, as well as immediately above and behind the pubes. She felt as if something moved or slipped when changing her position in bed. Not wishing to disturb the union, a careful examination was not made until between the second and third week, when on passing the finger along the pubic ramus an irregularity was discovered at the junction of ischium and pubis on the right side. Back of this there was a fracture through the body of the ischium at the lesser ischiatic notch, and with the finger within and slight pressure on the tuberosity, motion was plainly obtained at both points. The fracture was simple and uncomplicated; patient was placed on her back, a stout canvas hip and thigh bandage applied, with the right hip resting over a rubber ring, and was kept in bed for nine weeks after confinement. There was a history of "milk leg" in a former confinement, and the speaker questioned whether this had not been an undiscovered fracture.

Committee on Medical Topography, Meteorology, Endemics and Epidemics.—J. P. WIDNEY, of Los Angeles, the Chairman of the committee, said: The subjects of meteorology, endemics and epidemics had been so thoroughly presented to the Society year after year that he proposed to devote himself to a subject which might be classed under the head of medical topography. Among the varied climates of California, we had tested the sea-coast, the interior valleys, the mountain foothills, the high Sierra, and, to a limited extent, the desert slope of the east Sierra, not only as health resorts for invalids, but as a permanent residence for population. There remained a class of persons not necessarily invalids, but seekers after a more congenial climate who were not yet suited, and to whom all the regions above enumerated were unsatisfactory. Given a climate possessing the coolness and equability of the sea-coast, without its fogs and its harsh winds, and the desideratum would be reached. Such localities did exist, notably near San Francisco, in the higher elevations of the coast mountains, upon the peninsula immediately north and south of the bay, and yet to a more marked degree in the Sierra Madre mountains, back of Los Angeles, and in the Santa Monica mountains westward of that city, reaching to the sea. These localities derived their day freshness from the proximity of the cool waters of the sea, while the rapid radiation characteristic of the clear atmosphere of the uplands gave to the night air that peculiar crispness so tonic to the human constitution. These localities were necessarily difficult of access, but modern engineering skill was successfully overcoming natural obstacles. Already a project was under way within a few miles of Los Angeles that would make a practical test of this matter in Southern California. A plateau on Mt. Wilson, at an altitude of 2,000 feet, had been selected, and work upon the proper railway communication had already been commenced. The development of this new climatic home, and its adaptability to various diseases, would be watched with much interest by the profession, as the unusual combination of climatic, hygienic and scenic influences must show results that had not heretofore been noted.

A New Obstetrical Forceps.—DR. W. LE MOYNE WILLS, of Los Angeles, exhibited a modification of the well known and probably the best and most used forceps of James Y. Simpson. He had been asked to put on the forceps a good many times for other people as well as in his own practice, and in high operations where the head is lodged upon the pubis, or in an oblique presentation of the head, he found that the shoulders of this forceps were very much more dangerous to the perineum than the head itself. For that reason he had had a forceps copied exactly, but the shank was made heavier and wider, doing away with the shoulder, which often tore the perineum. He had used it only once and with perfect satisfaction. He presumed there were a good many who would take issue with any man who advocates the use of the forceps, but we are pain-savers and time-savers, both to the suffering woman and to the busy practitioner. He did not see why we should give chloral and give quinine and wait when we had a good pair of forceps, which merely is a lever and a guide, a force put in front instead of one that is behind. He did it; he had perfect confidence in his ability to use that instrument, and he did not tear the perineum. He showed them both together. [The two pairs of forceps—that of Simpson and the one designed by the speaker were exhibited.]

Committee on Gynecology.—The report of this committee (published at p. 242), was read by the chairman, W. A. BRIGGS, of Sacramento, who had taken as his subject "The Septic Origin and Antiseptic Treatment of Chronic Endometritis."

DR. C. CUSHING, of San Francisco: Every one who has treated the affections peculiar to women, and who has made applications through a speculum, whether with curette or electrode, or some kind of caustic, has every now and then had a tremendous peritonitis set up as a consequence of his interference. This must have been the experience of all. While I have no criticism to make of the author's suggestions—that is, the use of the curette, in which I quite agree with him; indeed, I much prefer the curette in endometritis to the use of electricity, and the application of carbolic acid and iodine in equal parts—and think it is the best treatment we have—I believe that the use of powerful caustics, such as nitric acid and chloride of zinc in the cavity of the uterus, is a dangerous remedy. I don't believe it would be safe; and furthermore, the condition that is left after the application of so severe a remedy as nitric acid to the cavity of this organ is one of pain and distress, which lasts for months and months in many cases, so that I have for years entirely given up the use of any strong remedies. For years I could not understand why, when I treated a serious case of endometritis, that a dozen or more cases would go on well and recover and the next case would develop a tremendous amount of inflammation, perhaps pelvic abscess, and it would cripple the woman, and she never would get entirely over the evil effects. Now we know why; at least we think we come nearer the truth. In women who have some chronic inflammation of the Fallopian tubes, any local irritation, whether from riding over a rough road or getting her feet cold during the menstrual period, or from the application of some caustic or active treatment to the uterus, will cause a contraction of the uterus; this contraction extends to the Fallopian tube, and some pus or muco-pus is forced out through the tube, and this woman has peritonitis. I would like to caution all those who have not had their minds made quite clear on this subject, against applications or the use of instruments of any kind about the pelvis in a case where there is a large tube, where the tissues are extremely tender, where there has been a history of a confinement in bed for three or four or six weeks perhaps, at some previous time as a consequence of pelvic inflammation, because I am very confident that a large proportion of all cases of pelvic inflammation is produced directly from the diseased condition of the tube, and I am confident this is the reason why men are exempt from this particular malady. Pelvic peritonitis is almost unknown in men, except as the result of a direct injury, while it is extremely common in women. I have no doubt that in 19 cases out of 20 this disease is due entirely to a diseased condition of the Fallopian tube, which has extended through into the peritoneal cavity. If a woman has diseased tubes, and there is a previous history of some kind of pelvic inflammation, then you should be very cautious about introducing any kind of an instrument into the cavity of the uterus, because there is great danger of setting up some kind of pelvic inflammation.

DR. R. BEVERLY COLE, of San Francisco, said he must dissent from the use of electricity when applied with so powerful a current as has been suggested. His experience in the employment of this agent had not been great, but such as he had had did not corroborate the statements made by Dr. Briggs. As to the employment of irrigation, all who have had much experience in the treatment of uterine diseases must have discovered that the danger is not limited in the employment of irrigation or the introduction of fluids of any kind into the cavity of the uterus; to that which has been alluded to, the escape of the fluids into the peritoneal cavity, but there seems to be a peculiar sensibility, particularly in inflamed conditions, and in conditions in which there is no inflammation; a sensibility of the uterine nerves that gives rise to the most abject suffering on the part of the patient. He had seen a drop of only a 5-grain solution of nitrate of silver injected into the cavity of the uterus produce the most pronounced pain, the most pronounced suffering, from which it required almost 24 hours for the most positive treatment to afford relief to the patient. He was satisfied that this was not due to an escape of the fluid into the peritoneal cavity, or even into the Fallopian tubes. He was satisfied of that, because peritonitis does not necessarily follow; but that there is a morbid sensibility, or an exquisite sensibility, of the nerves of the uterus there can be no doubt. He differed with Dr. Briggs as to the great value of the curette. He used it occasionally with good results, but did not believe that it was very much more valuable than the application of nitrate of silver or chromic acid. He was in the habit of employing nitrate of silver as suggested by Sir James Simpson, and afterwards by Byford and others, namely, introducing into the cavity of the uterus not a solution but a stick of the nitrate of silver, and allowing it to remain there, packing the vagina with a pledget of cotton dipped in salt and water, which of course would neutralize any escape when it becomes fluidized. He had very pronounced results, and never had any trouble whatsoever. In endocervicitis he used sticks made of sulphate of zinc and of copper, which are introduced into the cervical canal and allowed to dissolve there slowly. They never had given rise to an untoward symptom in his hands. He repeated these applications at least three times a week, until he succeeded in entirely destroying the mucous surface. In this way the principle of course is identical; it is only the election of the choice of means of effecting it. The curette unquestionably is an invaluable agent, but to attempt to establish any rule for the government of all these cases, would be an absurdity and an impossibility. As Dr. Cushing has suggested, there are some cases in which mechanical interference or much manipulation of any kind is contraindicated in the most positive manner, but he apprehended that it was supposed by the author of the paper that the medical man resorting to either of these measures would first inform himself as to what was the condition of the neck of the uterus.

Dr. L. M. F. Wanzer, of San Francisco, endorsed Dr. Briggs' paper most heartily. She was very sorry to disagree with Dr. Cole, but she would be very much afraid of the use of solid nitrate of silver in the uterus. She had a great many patients come to her, where it had been used, who said they suffered from the treatment, and the hardened condition of the canal seemed to be brought on partially by the use of solid nitrate of silver. She had not had as much experience as Dr. Cole, but certainly could not endorse the use of solid nitrate of silver in the uterine cavity.

Dr. Cole, in reply to Dr. Wanzer, said it was a wise thing always, before decrying an agent, to employ it. One fact was worth a thousand theories. Whilst he did not doubt that she had encountered cases such as she alluded to, he denied emphatically that they were attributable to the introduction of solid nitrate of silver into the cavity of the uterus and there allowed to dissolve. The effect of the nitrate was simply to vesicate the mucous membrane, and its action is very limited—very much more so, he apprehended, than the doctor thought.

A New Method of Ennucleation of the Uterus.—J. H. Wythe, of Oakland, read a paper upon this subject. He regarded this as the best method for arresting the growth of cancer of the uterus, and as it was suggested by a study of the minute anatomy of that organ, he would first allude to its normal histology After reviewing the histological structure of the body and cervix, illustrating where the different varieties of epithelium were found and the parts in which connective tissue was absent, he said: If, with Virchow, we consider carcinoma to arise from connective tissue cells, its origin in the uterus must be in the cervix or in the inner muscular wall of the organ, since here only we find connective tissue; but if, with Thiersch and Waldeyer, we consider it always to originate in epithelial cells, it can only begin in the squamous epithelium of the cervix or the cubical cells of the lining, or of the glands in the inner muscular wall. Practically, we find that if cancer begins on the vaginal portion of the cervix, it is an irregular papillary tumor, known as "cauliflower excrescence." It may also begin as hard nodules in the substance of the cervix under the mucous membrane, or it may commence in the interior of the cervical canal and spread along its mucous membrane. In any form the extension of morbid action depends on the continuity of similar structure. Now, if the uterine neck, and the internal muscular layer of the uterus with its glands, can be wholly removed, the cellular origin of epithelioma or cancer in the uterus will be obliterated. This is the object to be obtained by enucleation. After the first stage has passed curretting, amputation of the cervix or the removal of a conical or wedge-shaped plug have proved such failures that abdominal hysterectomy or extirpation of the uterus *per vaginam* (first performed by Schroeder in Germany and simultaneously, but independently, by L. C. Lane in San Francisco) has been proposed. The author's method would, in the early stages, be a successful substitute for all others, with the advantage of not disturbing the peritoneum or the arteries. It consists in removing the greater part of the uterine neck and all the minor muscular layer which contains the glands. To do this thoroughly a considerable portion of the middle muscular layer must also be removed. After preliminary and antiseptic preparation, with the patient anesthetized, in Sim's position, the uterine neck is seized with volsellum forceps and brought down, if possible, to the vulva. A steel sound is then passed to the fundus as a guide, and by means of scissors curved on the flat the cervix is incised around the jaws of the volsellum. The scissors are then used so as to cut a cylindrical plug from the muscular uterine walls, which moderate traction with the forceps separates from the external layer. When the end of the uterine canal is reached, as indicated by the sound, the scissors cut inwards and the cylinder of tissue is extracted. In this manner all the follicular layer and a large part of the middle muscular layer is removed. When the uterus was retroverted or fixed in an abnormal position the difficulties of the operation were increased, and it might be impossible to thoroughly remove the muscular layers. He had operated so far upon four cases, the first in March, 1888. The diagnosis of malignancy was in each case confirmed by microscopical examination. Up to the present there has been no sign of return of the disease in any one of them.

Dr. L. C. Lane, of San Francisco: I do not know that I have very much to add to what Dr. Wythe has said on this subject. Certainly the results which followed his operation proved the wisdom, correctness and excellence of his work. In regard to the operation to which he referred, in 1878 I performed the first enucleation in our country, and I then believed it was the first time it had ever been done, but like all inventors and discoverers, it seems that I had probably been ante-dated, or at least there was some one else doing the work about the same time. I believe that the method which is proposed by Dr. Wythe would be the correct one if we were to get the case early—before the disease has invaded the uterus; for I firmly believe, and have proved it by a great many operations. The record of 170 cases of removal of cancerous growths within the last eight years has certainly proved to me that cancer at a certain time is a local disease, and is curable by a proper operation; but the trouble is in the great majority of these cases, we do not get them early enough; we get them only after the disease has penetrated entirely into or through the uterus. I found by dissections some time ago that the uterus, contrary to what is generally supposed, cannot be thoroughly enucleated and leave the peritoneum inside. That can be readily proven by any one who will take the uterus and endeavor to make that dissection; if he will take a healthy one he will find that it will be very difficult, if not impossible, to detach any peritoneal coating from it. So that in this enucleation, usually, or I might say in every case, we have to leave a small stratum of the outer coating, plus a little of the muscular structure along with the external layer of the peritoneal or serous coating. The disease usually comes to the surgeon when it has reached at least that point. The lymphatics are peculiarly and singularly disposed, and differ from what we find almost anywhere else. It is a regular network; so that when the disease has once commenced within the cervical portion of the uterus, or within, we will say, the mucous membrane, in a very short time the cells or germs get into this closely interwoven network of lymphatics and permeate the entire uterus. These are some of the grounds which induced me to perform complete instead of partial enucleation, of which the doctor has here given an account. I think this partial enucleation would answer if he got the disease early enough, but at the time when we usually get it, it has frequently passed through the hands of one or more of the cancer quacks which we have in this city, and it is too late to do anything except complete enucleation; and then, I may say, that from my own experience it is, as a rule, too late to save the woman's life.

Dr. Wythe, of Oakland: I concur very heartily in what Dr. Lane has said in relation to the extension of the disease by means of the lymphatics through the muscular walls, if the case has progressed largely; but in very many cases coming to the hands of regular practitioners, epithelioma may be seen in its early stages, and that is the time to remove it. Then I am satisfied that if the entire inner layer can be removed, you can look with great confidence for an early cure. It seems to me, too, that the method that I suggested of removing it by the scissors is far better than scraping away the tissue with the curette or burning it away with chromic acid or anything else of that kind. It is simple and surgical and safe, and thus far has in my hands proven efficient.

Afternoon Session.

Medical Education and Legislation.—L. R. Webster, of Oakland, read a paper upon this subject. He believed that the trend of public opinion was in the direction of higher medical education, for human life was too precious to be handed over to the ignorant pretender. The age was one of progress, and it was a satisfaction to realize that as great strides had been made in the profession as in any department of science. It was no stretch of imagination to say that modern surgery had saved thousands of valuable lives which it would have been impossible to have done twenty years ago. Dietetics and infant feeding had saved a vast army, which even a quarter of a century ago would have been lost. Medical legislation was a difficult problem to solve. The public seemed imbued with the idea that the efforts of physicians to secure legislation demanding a thorough medical education was but a selfish effort. The press, also, that secured large sums for the publication of the flaming advertisements of quacks, was always found battling against that which would legislate away its gains. Regular physicians were not in great favor with the press, because they did not advertise. Unfortunately, the profession was but sparsely represented in the Legislature, and it was notorious that, at least in California, money, and in large amounts, was sometimes required to secure the passage of laws. He thought it would be a good idea to cease further efforts in this direction, until the public had been sufficiently punished by quackery to induce it to take a more enlightened view of the question. He believed that the remedy lay in the education of public sentiment.

Dr. S. O. L. Potter, of San Francisco, did not agree with the tone of the paper. He thought we had proved long ago that it was a waste of time and words and ideas to talk about protecting people against anything. The people think that they know how to protect themselves, and as long as they do we are only wasting time in trying to make any impression of this kind upon them. The only way in which we will ever obtain any legislation for our profession from the legal one, which controls legislation, is to demand it on the right ground, the ground that we can stand on logically, rightfully and properly, and that is protection to ourselves, not only against home quacks, but against foreign quacks. Free trade in medicine is a prevailing idea in this country alone. All free-trade countries, so far as manufactured goods are concerned, and so far as manufactured individuals are concerned, have no ideas at all on the subject of free trade in medical practice; but we, the great protectionist country of the earth, protect ourselves against goods and not against persons; we open the doors to every species of humbuggery and quackery, and elevate them ourselves by sometimes admitting their members into our own ranks.

Criminal Abortion.—W. W. Macfarlane, of Woodland, read a paper upon this subject. He said though the crime of feticide was universally condemned, it was alarmingly prevalent. It was the duty of the physician to prevent disease not only of the body, but of the mind, and those who habitually violated laws of morality were also ready to violate the laws of health. Criminal abortion was not a crime of ignorance; it prevailed most, perhaps, amongst the upper class of every community. It prevailed also amongst the lower stratum, both of which constituted the scum and dregs of society. The so-called upper class did not wish for children because they interfered with their comfort and pleasure. The poor and ignorant think that they cannot afford to feed and clothe a large family. In one case the gentlemanly and expensive scoundrel, in the other the cheap and ignorant quack, did the disreputable work for pay. Civilized people were horrified at the tales of infanticide and barbarity told by travelers and missionaries. Yet the American mother deliberately perpetrates and countenances a holocaust to which the slaughter of the innocents by Herod was insignificant. The law making feticide a crime is a dead letter in this as in most other States, and as it is administered, it might just as well be stricken from the statutes. The penalty, imprisonment for not less than one nor more than five years, did not seem excessive for cold-blooded and cowardly murder, yet he had never heard of a conviction in this State. The Penal Code of the State made it a felony to write or publish an advertisement of any medicine or means for producing an abortion or for preventing conception; yet every issue of some of the leading San Francisco papers contained advertisements of this character Under these circumstances, there was but little hope of a conviction in the Courts, and nothing could be expected from the press. He believed the clergy could materially aid in the matter, and felt that the Catholic clergy, at least, did their whole duty in this respect, as it was well known that feticide was very infrequent in Catholic families. Unfortunately, the crime was fashionable. The public mind should be trained that public reproach and condemnation would be more serious than legal punishment; and on the other hand, if a violation of the civil law were made a misdemeanor, convictions could easily be had.

Dr. H. D. Robertson, of Yreka, as a country physician, wanted to call attention to the fact that very often patients came to their doctor and informed him that they had missed their regular menstrual period; they thought they were pregnant, and they wanted some medicine to bring them around. The country physician as a rule, he was glad to say, explained to them that it is impossible to do such a thing unless there is cause. They immediately explain that the expenses of a trip to San Francisco would be greater than paying the country physician a liberal fee, and he had had them time and again mention the names of physicians in San Francisco—most of them of the advertising kind, though once in a while, he was ashamed to say, a man who claimed to be a regular—stating that they could, with money, procure it as easily as they could procure a prescription. There was no doubt in the world that criminal abortion is rapidly on the increase in this State. Whether it was owing to the fact that our population was growing rapidly, or that the morals of the profession were getting more lax, he would not risk an opinion; but surely if the physicians in a body would not only hold up the enormity of this thing, but would prosecute it liberally and vigorously, there was no doubt that they could, to a certain extent, decrease it.

Dr. J. C. Sundberg, of San Francisco, could never understand why it is that abortion is not considered murder in the first degree, and punished as other murder in the first degree, by death, because it is the wilful and deliberate taking of life. He did not know exactly the legal definition of murder in the first degree, but it was a crime against those that were absolutely unable to defend themselves. A highwayman who knocks a man down in the street stands a little chance of being shot himself, but the abortionist is in no danger whatever; therefore, he could not see why it should not be considered murder in the first degree. The only abortionists that seem to be brought to justice are in those cases where the mother died; there had lately been a couple of cases in San Francisco. Recently in a trial—where a woman died—the prosecuting attorney said that he would not ask for a verdict of murder in the first degree, because it was evident that the defendant did not intend to kill her. But he intended to kill the child, and accidentally he killed the mother with it. Sometimes persons will come to the physician and state that Dr. So and so will commit an abortion and has done it. A great deal of that is unquestionably true, but once in a while it is a lie in order to catch some other person. He had known instances of that kind, where a woman would come and want an abortion committed, and state that her family physician had done it before, but that he could not do it just now, or something of that kind. A doctor who comes to a town—a new arrival—is sure to be besieged the first year or so that he is there with these applications; after a time they stop coming; they know that he does not do it. It seems that the older women talk among themselves and say, "Well, he won't do it."

Dr. E. N. Foote, of Lockford, said he did not think it right to attribute all the sin to San Francisco doctors. There were in the country, in proportion to the population, as many humbugs and criminal abortionists, and he thought more, than in San Francisco. It was so common in the section of country where he practised—and he had an extensive acquaintance around throughout the county—that he was ashamed to say what county it was. Ladies come from a long distance to have the operation performed. Not long since a prominent citizen came there, and stated that he had a child twelve months old and his wife was going to have another, and he wanted something to give her. The speaker suggested that he might poison the one now living and let the one unborn survive. The man did not want to do that, but he was informed that he was soliciting the perpetration of a similar crime. In the country we are terribly troubled with those half-educated humbugs and quacks, and he was sorry to say that many of them belong to the medical profession; many of them are graduates from respectable schools, yet they are committing these crimes every month.

Dr. E. H. Woolsey, of Oakland, said it seemed to him that the line drawn by Dr. Sundberg, as to the legal status of the crime, was hardly tenable, because he believed a man would only be *particeps criminis*. The moral degree of the crime was perhaps as great as that of any other crime, and he thought the points of the paper were very well taken and should be very studiously looked after. There is no question but infanticide was a very widespread evil in the regular profession as well as by quacks, and there was not a month of his life that some one did not tell him of some man in the regular profession doing this very thing in the very quiet and religious little town of Oakland. The moral ideas of the younger members of the profession do not seem to be educated, or else their financial ideas are rather low, and they are parties to the crime that the quacks freely advertise. Of course there was a low moral tone in the community to countenance such a crime. It was the duty of the medical profession, as had been mentioned, to raise that tone, and if the regular pro-

fession throughout the country were to say to a woman that it was a crime, and to shame them when they come to ask for such a thing, it would tend very largely to remind them of their duty to themselves and to their offspring.

DR. G. P. REYNOLDS, of Alameda, thought a great advance might be made in this matter through the Board of Examiners. He did not know exactly what powers the Board had beyond granting licenses to practise medicine, but if they did not have the power to revoke licenses, they certainly should have. If a regular physician knew that he was in danger of having his license revoked, and of being placed on record as an illegal practitioner, he would be very much more careful in committing this crime. There is scarcely a physician who does not know other physicians who hold licenses from the Board of Examiners who are constantly performing criminal abortion. There is not a physician anywhere but could report and could prove cases beyond a doubt. It should certainly be made cause for revoking a license.

DR. R. W. MURPHY, of San Francisco, said that while the law seemed to be ample in its provisions for the suppression of this crime, and for the punishment of those who practise abortion, there was so much of it done in an underhand and secret manner, that it would be very hard for the committee and for the members of the profession who would like to suppress such practices to get at it. He would suggest, as the jurisdiction of this Society extended all over the State, that one of the best means of suppressing the evil would be to have private detectives appointed by the President; and in this capacity he thought women would be most successful; and let the Society pledge itself and its means to stand by these detectives in ferreting out this crime.

Committee on State Medicine, Hygiene and Adulteration of Foods and Drugs.—THOS. ROSS, of Woodland, Chairman of the committee, having alluded to its wide scope, said he proposed to discuss, briefly, some subjects properly coming under the different headings. In connection with medical legislation, he believed that those who argued, the more law we had regulating the practice of medicine the worse we were off, and that competent physicians require no protection, were in error. These were the days of preventive medicine and conservative surgery, and it was the plain duty of the profession to protect the public from the disastrous results of ignorant quacks attempting to treat diseases of which they knew nothing. Medical legislation was to shield the people from these irreparable injuries, and to insure them educated and competent physicians. He believed that in future all bills on this subject, presented to the Legislature, should have on their face a spirit of fairness and justice towards the different so-called "schools." All of these should be compelled to come up to a common standard of medical education, while their particular methods of treatment might be left to the judgment of the individual. Medical ethics, about which the public cared nothing, should not be considered in such a bill, but rather be dealt with by separate legislation. The speaker regretted to observe that while many physicians recognized the value to the State, and the importance to the profession, of accurate vital statistics, but little attention was paid to the law on this subject. He would impress upon members of the Society the necessity of of reporting regularly and faithfully, all births and deaths occurring in their practice, to the proper sanitary authority. Measures had been adopted by the Legislature for the encouragement of vaccination, but as far as he knew, they were a dead letter, except in some of the larger cities, and this was due to the refusal or neglect of the educational authorities to enforce their provisions. He believed it was absolutely necessary to secure the passage of an act for the remuneration of medical experts, when called upon to testify in Courts of law. There were but few members of the Society who had not suffered more or less in the absence of this provision. A physician should be well paid for giving evidence, for his knowledge and his time are his sole capital. The profession neither desired nor claimed exemption from the ordinary duties of the citizen in testifying in the Courts, but where, from study and the expenditure of both time and money, he has acquired knowledge which enables him to give valuable and expert testimony, he should certainly receive ample compensation. The speaker advised the appointment of a committee to draft an act for presentation to the next Legislature covering this subject. A question of interest to all new communities, was proper sewerage provision, and the system which is best adapted to the cities and towns in the interior valleys and plains is that known as the small-pipe, or Waring system, which did not carry storm water. The ultimate disposal of sewage in these localities was, he believed, best accomplished by intermittent downward filtration. The peculiar position of this State, with a coast line of fifteen hundred miles, with only one good harbor, on which was situated the metropolis, exposed us to the great danger of importation of diseases from the Orient. In this connection, a national quarantine station had, since its establishment, done good work in protecting the State from the invasion of small-pox from China. The study of the statistics of the State Board of Health for the past year presented two striking features: (1) The absence of any serious epidemic or contagious disease. (2) The enormous proportionate fatality from diphtheria, being 475 out of a total of 830, from all contagious diseases, and if those deaths, reported to be caused by croup, were included, it would reach 621, or 75 per cent. of the entire mortality, from these causes. The speaker closed his paper by alluding, at length, to the adulteration of various articles in common domestic use.

Dr. James Simpson, of San Francisco, said the mortality tables of this State were not perfect, but that was largely due to the profession, because physicians do not report their cases, though he believed there was a law requiring them to be reported to the County Clerk of each county. In San Francisco a perfect mortuary report was obtainable, he supposed, because no body is permitted to be buried or to leave the city without a burial permit from the Health Office. He believed this State was the third in the Union to form a State Board of Health, and when we look at what it has accomplished at various times, considering the material it had to deal with, and the impression it has made on the Legislature, he thought we had accomplished a great deal. Through the efforts of the San Francisco Board of Health and the State Board of Health, we had succeeded in getting a quarantine station established on this coast, not only in San Francisco, but at San Diego, and he believed that recently a site for a quarantine station had been selected in the State of Washington. Formerly San Francisco had to bear the expense of taking care of the Chinese who came here with every disease, small-pox being the prevailing one, and during the time the speaker was on the City Board of Health thousands of dollars were spent and hundreds of lives sacrificed by small-pox arriving in the city from China. There is now a quarantine station on Angel Island, second to none in the Union. It is prepared with every convenience for disinfecting, isolating and stamping out the small-pox before it reaches the city. He regretted that just now there were several small-pox patients in quarantine, or possibly there might have been an opportunity for the members of the State Medical Society to visit the station. The paper just read only failed in one thing: that it did not impress upon the profession, upon the public and upon our future legislators what was really needed. All we want from the Legislature is plenty of money, to enable us to prevent disease. It is in their interest and in the interest of all. I have had a little experience in politics myself, and I find that there is no time that I can make an impression upon a nominee for the Assembly or Senate, or upon any one who seeks political office, as well as when he is up as a candidate for election. He would impress upon members that now was the time, as several Assemblymen and Senators will have to be elected this winter. Regarding legislation regulating the practice of medicine, there was a great deal to be done. The State owes it to the public to see that no one has permission to practise medicine who is not well qualified.

Dr. H. D. Lawhead, of Woodland, said in the matter of legislation, his experience had been that when we attack anything savoring of the ethics of the profession, the more we agitate it the more difficult it is, and the more disastrous the situation becomes. He agreed with Dr. Ross that all matters pertaining to medical ethics be left within the jurisdiction and subject to the by-laws of the several State societies. When we come to mix the ethics of the profession up with the general law, we have certainly failed. The question of sanitation, of course, was one of great interest to us all, especially those who are in the valleys and in places where artificial means of sewerage and drainage have to be resorted to.

Suggestions on Hygiene and Sanitation.—**M. M. Chipman**, of San Jose, read a paper upon this subject. He said the manner of the introduction of pathogenic microbes into the human system has not been definitely settled in all respects. In every act of inspiration, it might naturally be supposed, we are liable to infection, provided germs of a malignant species are present; but Nature has provided protection against such constant exposure, in the complicated structure of the lungs, by which the air is filtered of its germs, in the process of breathing. He did not consider that experiments had been carried to an extent, in this matter, to justify the statement, as an ascertained fact, that living germs never enter the body through the lungs, yet there is evidence enough to confirm the position that such entrance is rare, if it ever occurs. On the other hand, there is no obstacle to entrance, by the mouth and alimentary canal, with the food and beverages; and therefore, except such infection as may be introduced by the means of external wounds, punctures and abrasions, and the specially exposed mucous surfaces, the hurtful microörganisms, if not exclusively, must principally, obtain entrance by the way of the oral cavity. Having obtained entrance, the germ is carried forward with the food and fluids into the alimentary canal, and perhaps on through other conduits, until a location is reached wherein abound the special resources adapted to its nutrition and development; there it settles down and proceeds to colonize and multiply. The micrococcus of diphtheria locates on the tonsils and in the throat, and there initiates its poisonous processes; the bacillus of influenza first puts its grip on the throat and bronchial passages; the coma bacillus glides along with the ingested food, until arriving where the process of digestion has become pretty well advanced, when the changes wrought in its vehicle of entrance has converted the semi-fluid mass into a culture medium just suited to its use, and it proceeds to multiply rapidly. The bacillus of typhoid fever finds its special nutriment in the glands of the small intestine; the pneumococcus and the bacillus of tubercle are developed most readily in the aërobic conditions and tissues of the lungs; whilst the germs which originate small-pox and other papular and eruptive diseases are evidently absorbed from the canal and thence carried through the circulation to near the surface before they find the conditions of shelter from the great blood currents, and the character of tissues, adapted to their colonization. The germs which originate syphilis, erysipelas and other diseases which obtain entrance at the surface, usually commence their work, at once, in the tissues, at or near the point of entrance. The idea which prevailed for some years, immediately after the discovery, that the fermentative process is due to the action of microörganisms, that bacterial diseases are caused by fermentation of the blood, is now known to be erroneous. The blood, as contained in the vessels of living animals, by its constant circulation and by its antiseptic and germicidal properties, is protected against all fermentative processes; and although in such diseases bacteria are absorbed into the blood from the tissues, where they are developed, yet they are rapidly eliminated and, with the residual products, conducted by the lymphatics, which terminate in the lower bowel, to be discharged therefrom with the stools. These processes go on as long as vitality remains in the subject of the attack, the devitalization of the subject being the result of the absorption into the blood of the poisonous products of the molecular changes wrought by the microbes in other tissues, the so-called blood diseases not being blood diseases in the true meaning of the term, but diseased conditions of other tissues. The processes and results of pathogenic bacteria in the tissues, very well explain the causes of the extraordinary waste and devitalization in the, properly so called, waste diseases, and the pathology, in connection, and physiology, show the reasons why the blood is, necessarily, the principal medium by which remedies are applied, in such diseases. Why, stimulants, tonics, sedatives, nutrients and antiseptics are required, according to the special conditions of each case; and the poisonous products of the molecular changes, which the microbes induce, with the great variations in their chemical characteristics, as yet only partially understood, show why the therapeutics of nutrition are often more intricate, in such complaints, than the medical therapy.

Medical Expert Evidence.—J. P. BOYD, of Santa Ana, read a paper upon this subject. He wished to suggest an improvement in the present method of teaching medical jurisprudence in the colleges, owing to its importance to the State, and from the fact that it was a means by which the public judged of the wisdom and dignity of the profession. The want of preparation for public duties was shown most conspicuously whenever a young physician was required to give evidence in criminal cases where often the reputation of families or the life of the accused depended upon his testimony. The records of every Court had mortifying examples of ignorant and blundering testimony, where a little preparation would have enabled the witness to acquit himself with honor to the profession. Numerous examples could be quoted in support of this statement, and the colleges were largely responsible for this condition of things, when they presented no motive to the student for a thorough study of the subject. The fact that some of the finest decisions ever rendered in criminal cases had been almost in the words of learned medical experts, emphasizes the importance of this subject to the dignity of the profession and to the benefit of the State. If the twentieth century was to witness the reign of the physician, it was time the profession was preparing itself to use with judgment the power to be given it, for knowledge must be gained before power can be exercised. The colleges should provide separate chairs for teaching medical jurisprudence, and a rigid examination on this subject should be as essential as any other for graduation.

Dr. H. H. Clark, of Santa Cruz, said insane heredity was acquired from many sources. It was never implanted in the human system; it had been acquired from the start, and while it was transmitted now, and had become, as it were, fixed with masses of people, yet it was an acquired habit, and Nature in her efforts, attempts to restore it to its natural standard. The position of the author regarding the young men of the profession is correct; we should be better prepared to go into a court of law. We are at the mercy of any lawyer that pleases to take advantage of us. The conclusion arising from the cross-questioning in hypothetical cases was such as to bother almost a philosopher. He could assure the younger members of the profession that to read a little law in connection with medicine would be of vast benefit to them. The suggestion that a chair of Medical Jurisprudence be established was a good one.

Executive Committee.—The Executive Committee, to whom was referred the recommendations contained in the President's address, presented the following report: *Advertising.*—The committee heartily endorses the statement of the President in condemning advertising by physicians in the ordinary sense of the term, whether directly in the advertising columns of the lay press, or in the publication of items relating to purely professional matters. *A Secretary of Public Health.*—The committee, while approving of several features in both measures to which reference has been made in the annual address, believes that either have inherent defects which more mature consideration may eliminate. While indisposed to endorse either measure, the committee warmly approves of some plan looking to the creation of a bureau of public health; whose Secretary shall be a medical man, and with a seat in the cabinet. *National Law Regulating the Practice of Medicine.*—The committee believes that a national law regulating the practice of medicine, by providing a uniform standard, would, if practicable, greatly improve the present status of the profession. *Expert Witnesses.*—The committee believes that the proposal to make the expert medical witness an adviser of the court and an impartial witness, will help to relieve the profession of much of the opprobrium now attaching to medical expert testimony. It recommends that this matter be referred to the Committee on Medical Legislation, and that steps be taken to insure adequate protection and compensation for the witness. *Pan-American Medical Congress.*—The committee recommends that the Society endorse the Pan-American Medical Congress, and that pending formal action at the session of 1893, individual members shall heartily support the movement in every possible way.

Selection of Place of Next Meeting.—The selection of the place of next meeting was not marked by any of that enthusiasm and excitement that has characterized the sessions of recent years. Monterey, Santa Cruz, Stockton and San Francisco were all proposed and a vote taken on each in order, San Francisco being selected by a very small majority over Stockton. Though there was a very full meeting, comparatively few of the members voted, four-fifths, perhaps, keeping their seats throughout.

Election of Officers.—The Society then went into the election of officers, with the following result:

President	W. E. TAYLOR.
First Vice-President	M. REGENSBURGER.
Second Vice-President	H. D. ROBERTSON.
Secretary	WM. WATT KERR.
First Assistant Secretary	CHAS. C. WADSWORTH.
Second Assistant Secretary	H. BERT ELLIS.
Treasurer	J. H. PARKINSON.
Board of Examiners	M. REGENSBURGER, T. J. LETOURNEUX, C. E. BLAKE, W. B. LEWITT, G. F. SHIELS, L. BAZET, C. C. WADSWORTH.
Alternates	H. H. HART, H. N. WINTON, H. E. SANDERSON.
Board of Censors	J. H. WYTHE, G. P. REYNOLDS, H. M. POND, S. S. KAHN, G. B. RICHMOND.

THIRD DAY—THURSDAY, APRIL 21—MORNING SESSION.

Report of the Board of Examiners.—This report was read by the Secretary, Chas. C. Wadsworth, of San Francisco. The number of meetings held during the year was 13; original certificates granted, 202; lieu certificates, 3; additional certificates, 2; applications refused, 5; applications withdrawn, 7. 191 certificates were issued to holders of American diplomas, 39 of whom were California graduates, and 33 certificates to holders of foreign diplomas. The Board desired to present for the consideration of the Society, and as material for the Committee on Medical Legislation, the former action of the Board adopted January 4, 1888. Following a preamble setting forth its official duties, the accompanying resolution was adopted: *Resolved*, That on and after April 1, 1891, the Board of Examiners of the Medical Society of the State of California will not grant certificates to practise medicine on diplomas issued after that date by colleges which do not require that all candidates for graduation shall have studied medicine not less than three full years, and shall have attended not less than three full regular courses of lectures delivered during three separate years. The legality of this action being questioned, it was referred to the attorney of the Board, who advised that the resolution be rescinded, and in accordance with his advice the following resolution was adopted: *Resolved*, That the resolution adopted by this Board January 4, 1888, providing that no certificates be granted on diplomas issued by colleges having less than a three years' course, be and the same is hereby rescinded. Thereafter, and in accordance with this action, certificates have been issued, although the same question has been contested in the courts of Oregon, and the decision rendered fully sustains the State Board of Medical Examiners of that State in their action. The Board hoped that the Committee on Medical Legislation would be able to formulate such regulations as will not only protect the profession, and the public, from the insidious advance of the irresponsible pretender, but that their action will be so fully in accord with statute law and equity that its enforcement will surely follow the enactment. The speaker said there seemed to be an impression among the profession that the Board could exact from its licentiates a strict observance of the Code of Ethics. The courts, however, have refused to recognize the code, and unless a man shall promise to do impossible acts, he may advertise without restraint. It is also of record that a college may not deprive a graduate of his diploma; they can only drop his name from the list. The Board had prepared a supplement to the fifth edition of the Official Register of Physicians and Surgeons in the State from January 31, 1891, to May 1, 1892. The report of the the Treasurer of the Board showed that the total receipts for the fiscal year, there being no balance from the previous year, had been $1,175, the total disbursements being $1,174 95, leaving a balance of $0 05.

Report of Secretary.—The report of the Secretary, W. WATT KERR, of San Francisco, showed that there were 390 active members on the roll of the Society.

Report of Treasurer.—The Treasurer, J. H. PARKINSON, of Sacramento, presented his report, showing that he had received during the year $1,882.95, and disbursed $2,210.24. The amount of cash on hand was $2,112.21.

Committee on Clinical Medicine, Including Diagnostics and Therapeutics.—The report of this committee (published at p. 231) was read by the Chairman,

J. H. **Utley**, of Los Angeles, the subject of his paper being "The Diagnosis and Treatment of Incipient Phthisis."

Dr. S. O. L. Potter, of San Francisco, said: This was one of the most candid reports that had ever come from Southern California about climate. We generally hear that the climate of every part of our State, or every part of the southern counties, is perfect. It was really refreshing to have a gentleman from the southern part of the State come here, with scientific deductions from his observations, regardless of local prejudices. He agreed with Dr. Utley that we had no specific for phthisis, and that so far the efforts of specialists have failed. At the same time, he could not but feel that there was yet something behind tuberculin that will come to the front. If there is anything certain on the face of the earth, it is the power of vaccination over small-pox, and the work of Koch is a repetition of the work of Jenner. It was not Koch's fault. The speaker knew that Koch had been forced, against his will, to publish that announcement to the Berlin Medical Congress before he was ready, before he was prepared, and when he himself acknowledged that he had not gone far enough to be able to make a scientific statement in regard to it. The speaker believed that our only chance for the attainment of specifics in the treatment of the disease, was to follow the lines of Koch, and those of Jenner. The treatment of phthisis must be hygienic and climatic, and so far as the hygienic treatment is concerned, over-feeding is perhaps the best, as much as the system will stand. He believed the case ought to be fed up to the very highest notch possible, with every kind of food that the patient could assimilate. In the climatic treatment of consumption, the hot, dry atmosphere of the desert is decidedly the best. In Europe the fashion changed; here one year and another place the next. In this country some go to the Adirondacks, some to Colorado, others to Southern California. In Europe the favorite place now is Algiers. But what is Arizona but Algiers? And when we say Arizona we had better say California, too, because the ideal spot of all others, in his opinion, and of many others who had tried the matter personally, experimentally, and by sending patients there, is that low sink we may call it, that low part of the country on the boundary of California and Arizona, known as the Needles. In the section of country around there, the patient is entirely protected from the coast influences, from the influence of the Gulf of California, and he can sleep out of doors all the year round, and breathe the hot furnace atmosphere, in which, the speaker believed, no germs can live very long. The locality was not very pleasant, so far as society is concerned; it is rather a hard place to get along in, and have every comfort that one needs, and as a rule it is very difficult to keep patients there; as soon as they begin to improve they leave, and when they leave the old trouble returns. If we had more such candid reports upon this subject, giving up the search for specifics, and looking at the real treatment of these cases, by isolation of the affected and antiseptic care of the sputum, in which the great danger lies, it would be most refreshing in a Society of this kind.

Dr. H. L. Wagner, of San Francisco, inquired if Dr. Utley had observed any difference in the size of the tubercle bacilli in the sputum examinations in relation to the prognosis of the case. He had observed, after Fraenkel, of Berlin, had pointed out the fact to him, that the smaller the bacilli are the more apt the case is to be fatal. He referred especially to laryngeal phthisis, and had verified this three times, and he would like to know if Dr. Utley had observed this also.

Dr. Utley, in replying, said: The point made by Dr. Potter regarding the dry air of the desert is one, I think, of very great importance, and in my report I should have said that a portion of eastern southern California, or southeastern California, is a desert, and that the climate there is very similar to Arizona. There is a place just this side of Yuma where a number of patients have gone from Los Angeles and done remarkably well. There is also a portion of the State to the south where the altitude is below that of the ocean; it is some two or three hundred feet below the sea level, and at that point patients have done extremely well in the catarrhal form of phthisis. In speaking of the humidity of Southern California, I wish to make the point especially in the catarrhal form of the disease. In reply to Dr. Wagner, I have never noticed any particular difference in the size of the bacilli from different regions—from the larynx or from the bronchi.

Committee on Laryngology and Rhinology.—THOS. F. RUMBOLD, of San Francisco, Chairman of the committee, read a paper on the anatomy of the nasal passages and connecting cavities, illustrated by numerous colored drawings which were exhibited and demonstrated. He said the remembrance of the relation of these parts to one another was essential in examination, diagnosis and treatment. Thus, if a tonsil or tonsils were inflamed, the abstraction of blood from one or both inferior turbinated processes would relieve the pain in the tonsil more promptly even than incision in the swollen gland. A knowledge of the nervous distribution enabled us, by applying the positive pole of a galvanic battery to the inferior turbinated process, to relieve pain in a tooth that had been aching from being hammered in filling a cavity with gold. In treating diseased conditions of the ethmoidal or sphenoidal cells, or antra of Highmore, it must be remembered that their openings leave the cavities in the highest portion, so that none of them can be drained of their contents while the head is in an erect position. This is also true of the frontal sinuses, middle ear and mastoid cells. He was aware that physiologists stated the contrary, but it was not the case. One of the most important lessons to be learned from the anatomy of the nasal passages is the certainty that many common mental troubles and mental diseases are traceable to inflammation of these passages and of the cavities connected with them. Close investigation showed that mental symptoms of a marked character did not follow disease of all portions of the nasal passages, but was most likely to occur when the two upper turbinated processes were inflamed. A severe cold in the head often interfered very seriously with a patient's mental capacity, because colds affect the superior nasal mucous membrane. The speaker's clinical experience had been that the reason why some patients, with comparatively slight uterine, urethral or rectal troubles, became insane, while others, with much severer forms of these diseases, were mentally unimpaired, could be found in the fact that those who had become insane had serious nasal trouble, though not sufficient to affect the mind without the irritation of the accompanying disease. The speaker mentioned several cases supporting his views on this subject.

DR. W. D. BABCOCK, of Los Angeles, said by referring to the text books the anatomy of the nose would be found in a much less crude state than it had been given here. He hardly thought anything special need be said about it.

DR. H. L. WAGNER, of San Francisco, said Dr. Babcock spoke on the part of the anatomists, and he would like to speak on the part of the physiologists, having studied the physiological aspect of these cavities to a great extent. We should not recapitulate facts which have been stated about thirty years ago—what physiologists thought at that time. The entrance into the sinuses, or plainly speaking, the holes, are not for the purpose of drainage. That was the idea, as I say, about twenty or thirty years ago. Modern physiologists, including rhinologists and laryngologists, came to the conclusion three or four years ago that the holes to these cavities are merely there to increase the resorption of a very slight secretion of the mucous membrane of the cavities, and that sometimes they can be diseased through retention of pus and muco-purulent secretions. They had nothing to do with draining these cavities, as physiologists said thirty years ago.

DR. RUMBOLD, of San Francisco, was sorry that he did not have the anatomy to show it, as he had prepared his paper for that purpose expressly. He had only got half through his paper, and therefore could not give all the practical remarks that he wished to make on the subject. The subject to be placed before the Society was "The Anatomy of the Nose." As he could not discuss that subject, he had to do the next best thing, and that was to make some practical remarks upon it. Most of these had therefore been left entirely unsaid. He made no remarks upon, and did not expect to state anything about the physiology of the nose, or of these cavities, as that was not the subject, consequently he thought both of these criticisms were not quite apposite to the subject of the paper.

A Contribution on Nasal Surgery.—H. L. WAGNER, of San Francisco, in presenting this subject, said, of late considerable attention had been paid to the removal of obstruction of the nasal passages, caused by deflections of the septum or new growths. To remove these he preferred drilling. Serious and often uncontrollable hemorrhage occurred, to prevent which he first used the electrolytic needle with the best results. The needle, which is best made of an alloy of platinum and iridium, is introduced three or four times, at intervals of three to five days before the operation. This method was most effective, and gave a clear field for the operation.

The author then said he wanted to make a few practical remarks in relation to antral operations. He had arrived at the conclusion that the operation from the nose was not satisfactory, as it sometimes induces an atrophic process of the mucous membrane, which is perhaps a great deal worse than the antrum trouble, and he would like to tell what conclusion he had come to. It was this: that the best way to go into the antrum was through the alveolus after a tooth has been extracted, which should be done by a dental surgeon and not by the laryngologist. It sometimes happens, especially with ladies, that the patient does not like to lose a tooth. It was then best to make the opening inside, a little above the alveolus, at the hard palate. He had found this method most successful; healing goes on after the antrum has been opened, and he prefered to make the opening either from the alveolus or in the hard palate. The speaker exhibited a specimen illustrating the operations.

Dr. W. D. Babcock, of Los Angeles: In the last four years I have had some 7 cases of abscess of the antrum. I have not had the operation performed in the position that Dr. Wagner mentions, through the hard palate. In every instance I have had it made through the alveolus at the fold between it and the cheek, above and between the second bicuspid and first molar, and have had the dentist first make the tube to fit the trephine or burr—a little smaller in fact; the drainage in every instance has been good. Food does not get into the tube, and the case goes on to a rapid recovery. In most cases the patient is able to wash out the cavity by the pressure that he can get from the cheeks, first thoroughly disinfecting the mouth by rinsing; then filling the mouth with the disinfecting fluid and throwing the head forward, the cavity is washed out, and can be washed out as many times a day as the patient sees fit. In the 7 cases the average time of recovery, or where the discharge has ceased for two months, has been two months and a half.

Dr. J. D. Arnold, of San Francisco: I am glad to hear Dr. Wagner say he has entirely abandoned opening the antrum through the nostril. I happened to be in Vienna at the time when Prof. Kucherhandl was making the dissections for his excellent work upon the antrum of the nose, and he first proposed that operation to Miculicz in Vienna. Miculicz never made a report of it until about six or seven years afterwards, but Felix Simon, in London, performed the operation three times, and was very much dissatisfied with the result. As to whether or not the opening into the antrum is better made through the palate than through the superior portion of the alveolus, it seems to me can only depend upon whether or not the most dependent portion of the cavity is thereby opened. If any one place is better than any other, it is because that one place will assure most perfect drainage of the cavity. When one is to be guided or controlled by cosmetic reasons, such as the retention of a tooth in the mouth of a beautiful young woman, that of course puts an element into a surgical operation which we cannot exactly look at from a purely surgical standpoint. But independent of whether or not any possible deformity may result from the operation, I think we cannot too strongly insist upon the absolute abandonment of the Miculicz method of opening the antrum through the nostril. I think it is the almost universal experience of laryngologists and dentists—because many of these cases never come into the hands of the physician at all. I believe the majority of them are operated upon and carried through by dentists who rarely refer such cases to the physician unless they present some unusual difficulty or some unusual feature. I am also firmly convinced that in the future the Miculicz operation will never be performed; and I shall be very glad to get some personal experience upon opening the antrum at the point which Dr. Wagner points out.

Dr. T. F. Rumbold, of San Francisco, said it had been his experience during the last thirty years, that all diseases of the antrum that he had treated originated in the nasal passages; consequently treatment of the antrum without treating the originating disease, would be a long and tedious one. He had at first treated cases by the extraction of the molar tooth, which sometimes even pierces the antrum, only leaving the mucous membrane covering the top of the root; but these methods were slow, and food sometimes got up there. This was obviated by having the patient plug the metallic drainage tube with a piece of wood or ivory. He did not now treat a single case by opening in any direction, but he would prefer to open on the labial side, not through a tooth; not that that side would completely drain the cavity, because the patient can turn the head to one side and make the opening of the cavity the lowest point, consequently it would drain it as completely as it would through the tooth; and the same thing can be done when opening under the inferior turbinated bone.

DR. WAGNER: Regarding medication of the antrum, I should have said that it depended entirely upon the case. Dr. Babcock mentions taking some antiseptic fluid and pumping it into the antrum. Now, that is done very often by dentists. I have seen it in England, and also to a great extent in France, but we must remember that, lately, Miller, who is one of our greatest authorities upon odontology, has proved that there are a great number of microbes in the mouth. Now, if we take an antiseptic solution into the mouth, a certain part, perhaps all of it, may have been entirely absorbed and used for merely disinfecting one-third of all the microbes in the mouth, and the remaining two-thirds—the septicemia microbe, and so on—might then be brought into this cavity. It would be a good thing, without any instrument, to get the fluid into that cavity, but it would take a long time to first disinfect the mouth, and I advocate and pursue the method of injecting or spraying directly into the antrum. The speaker said there were very few now who did not believe that empyema of the antrum, except in traumatic cases, was produced from the teeth, and not from the nose. Nearly all European authors stated this. Three or four years ago there was some disagreement upon this point, but most of them have now come to that conclusion. In studying this question he had found that the microbes of empyema of the antrum are identical with those found after examining the pulp of the tooth where one was extracted. He had also examined the nasal cavity, and did not find any except some plain air microbes.

Is Jequirity a Safe Remedy? Yes.—W. D. BABCOCK, of Los Angeles, read a paper upon this subject. He said a successful treatment for trachoma and pannus has been sought for a long time, and various methods, operative and therapeutic, had given good results in the hands of specialists. All could not do special work, and if there was a safe remedy that could be used by the general practitioner it should be known. He believed this requirement would be fulfilled by jequirity. Anyone who can treat a case of ophthalmia neonatorum can handle a case of jequirity inflammation, and he thought that no intelligent physician need have any hesitation in using the drug. In most of the cases he had treated, he had not seen the patient until after the inflammation had passed away. In only one case had there been the least anxiety, due to the patient exceeding the instructions; yet the result in this had been better than in any of the others. He could not agree with some authorities who regarded the remedy as dangerous, and believed that their cases had been unsuitable, or that it had been used too freely. He employed an impalpable powder of the bean. The eye was dilated fully the day before, and kept so during the time that it was inflamed. About twice the size of a mustard seed of the powder is dusted into the eye, preferably on the everted upper lid, at bed-time, the operation being painless. If inflammation has not supervened by morning, apply some more of the powder, and in about three hours the inflammation begins. This is at its height in twenty-four hours, and continues for three or four days. A wash of bichloride (1:5000) or a saturated solution of boracic acid is used every hour during the day and every three hours during the night. This must be gotten well under the lid, and the washing kept up for the first three days, after this, not so often. The skin around the eye is kept well smeared with vaseline. If the pain is not very great, nor the secretion profuse, hot water is applied for ten minutes every hour or two. Otherwise, cold water must be used. Cocaine is of great service in relieving pain. Ten days after the first application, an astringent will aid recovery. If the first operation should not prove successful, it can be tried again in about two months. Jequirity is a great searcher-out and makes a clean sweep of the whole membrane, being, therefore, more thorough than the usual surgical treatment.

DR. A. BARKAN, of San Francisco, hoped heartily that future experience in using this remedy would bear out all the results Dr. Babcock had obtained in regard to its efficacy and its harmlessness. If so, we would surely have an excellent remedy for the treatment of a disease which is tedious, and sometimes serious in its results. He could not feel quite as hopeful as the author, although he would admit that he had not a single experience to back his distrust of this remedy more than the reports of others. But there was a little physiological reflection that had kept him thus far from using it. This remedy in its results closely resembles fresh gonnorrheic inoculation. This inoculation which changes the chronic inflammatory process into an acute blenorrhea, has been in vogue for many years, and has been given up. Why? Because the surgeon was never sure of the ultimate result of the damage which might be done to the cornea, in the way of ulceration setting in, old ulcers deepening, abscesses being produced, perforation occurring, and final loss of the eye-ball. The effect of jequirity to the conjunctiva and upon the eye, reminds one very much of the same process going on. We are very fortunate if the eye escapes such disastrous results; but they have occurred in the hands of very experienced men, such as Knapp, of New York, and he was afraid they were going to occur again. He hoped to hear that the doctor had used either a new method, or had modified the old application of jequirity so as to make it less virulent in its effect; but as he understood the paper, it was the application of the pure powder, and a very severe attack of conjunctivitis was mentioned as following it, He hoped he would be able to report further on when he sees those cases again, whether the cure produced was a permanent one, or whether some trachoma follicles did not escape as they do in scraping or pressing. The speaker here exhibited and described an instrument recently introduced by Knapp for the treatment of trachoma. It is a forceps, a modification of that by Noyes, at the end of each branch of which there is a roller. It works just as a mangle does. After local anesthesia has been produced, the lid is thoroughly everted, and every part of the membrane, both the upper and lower conjunctiva of the eye-lid, where very often trachoma granules hide themselves, is taken hold of, and by using a good deal of force the lid is passed through the rollers of the instrument just as linen is passed through the rolls of a mangle. He had tried the instrument, and it worked beautifully; the reaction was very slight, and the result thus far had been exceedingly satisfactory. Sometimes it is necessary before using the forceps, to incise the individual trachoma granules with a bistoury, or to prick them open with a needle.

Dr. Babcock said he had coming into his office every day a man who has a judgment of $25,000 against a physician for treating his eyes by the use of jequirity. Notwithstanding that menace he still used jequirity. In the majority of cases where rubbing, rolling and scraping are used, it has to be done over, once, twice or three times. We hear of the successes; we do not hear of the failures. The operator cannot every time get hold of the follicle and squeeze it out. He brought the subject up for the purpose of bringing it to the attention of the general practitioner, who is away from the cities, out of reach of the specialists, and some of whom have to take care of their patients and also their own horses. He used jequirity cautiously at first until now he could handle it fairly well.

The Use of Fluorescin in Diseases of the Cornea.—K. Pischl, of San Francisco, read a paper upon this subject. He said it was difficult for an oculist to bring forward observations which are of interest to the profession at large. He wished to call attention to a method of facilitating the diagnosis of the diseases of the cornea, which would be of interest to the general practitioner in the interior, who is obliged, in the absence of a specialist, to treat these ailments. It is difficult to detect a superficial loss of epithelium, to discern whether corneal phlyctenulæ or ulcers are spreading or diminishing, and to recognize how deep the infiltration extends. The difficulty was increased by the accompanying photophobia. Fluorescin furnished a means of facilitating the diagnosis. Fluorescin is obtained by the action of phtalic anhydride upon resorcin in the presence of a dehydrating agent like sulphuric acid, at a temperature of 120° C. Fluorescin is not soluble in water without the addition of soda. He used a 2 per cent. solution in a 3.5 per cent. solution of soda, which did not irritate the eye. When a drop of this solution is instilled into the eye, the normal cornea remains uncolored, but every loss of epithelium is indicated by a bright green coloring, which is more intense in infiltrated parts. In phlyctenular ophthalmia, the fresh ulcer can at once be distinguished by its green color from an old opacity, which is never colored. A foreign body is encircled by a green ring, masking the infiltration. In phlyctenular and serpiginous ulcers the infiltrated advancing edge is so intensely colored, that we can exactly limit the action of the cautery loop. A decrease of infiltration, or an improvement in an ulcer, is immediately indicated by a paling of the color. In the conjunctiva the pustules of phlyctenular ophthalmia become a dark yellow, easily distinguishing them from similar excrescences in episcleritis, which do not become colored; neither do pingueculæ or pterygia become colored. This coloring appears in a few seconds to half a minute, and lasts from two to three hours. The green parts are more sharply defined if the superfluous color is first washed away. The yellow discoloration of the eye-lid and cheek caused by overflow, can easily be washed off.

AFTERNOON SESSION.

Committee on Diseases of the Mind and Nervous System.—A. M. GARDNER, of Napa, Chairman of the Committee, read a paper on "Bettered Facilities for the Treatment of the Convalescing Insane." (Published at p. 251.)

DR. J. W. ROBERTSON, of San Francisco, in opening the discussion, said: I have listened with great attention to the very admirable paper of Dr. Gardner, and it opens a question which is fast becoming one of the most important. From the time that California became a State she has made the most liberal appropriations for the care of her insane. When other States were confining their insane in poor-houses, California built a magnificent institution. As the asylum population increased, her facilities increased with it, until something like $6,000,000 has been expended in the building of asylums, and something like $1,000,000 will annually be required for support and maintenance. With all this expenditure and waste of money Dr. Gardner has shown that our asylums are still imperfect. It has been claimed that asylums for the chronic insane should be built. The Legislature, a few years ago, passed a resolution that Agnews should be a chronic asylum; in other words, that all chronic cases should be sent to Agnews and there simply maintained, and that no efforts to cure should be made. Strong objections were raised against this proposition, and I think principally from a sentimental point of view. It was claimed that no one should be doomed to chronic insanity, and that the line was indefinite when a person became chronically insane; another reason was that in the East chronic asylums were synonymous with, or worse than, jails or tombs. For this reason all our asylums are made to receive both the acute and the chronic cases. In this we have made a great mistake. As Dr. Gardner has truly said, Napa will only accommodate something like eight hundred patients; fourteen or fifteen hundred are there at the present time, and how are they accommodated? Every ward is laid at night, not with cots, but with mats and with beds of straw. We can hardly pass through the asylum without passing over the bodies of the insane; they are crowded together worse than animals in any pig-pen; it is impossible to segregate those who can be treated from those who are chronically insane; they are simply huddled together and all treated alike. I am surprised at the statistics Dr. Gardner has presented showing the number of recoveries. Only 27 per cent. of all who are admitted are said to have recovered. The latest authorities claim that something like 80 per cent. of cases of acute mania can be cured, and about 60 per cent. of all cases of melancholia, and the experience of all alienists agrees with this assertion. Of course many who are sent to an asylum are not suffering from either mania or melancholia, but have become chronically insane, or are suffering from some disease which is incurable; by all means such cases should be relegated to chronic insane asylums. Napa, and the asylums which have been recently located, should be kept for the purpose of actually curing those patients of whom there is some hope. Perhaps the treatment that a patient receives upon being sent to an asylum intensifies this percentage. As a rule the public are not yet educated to believe that insanity is a disease; they look on it almost as a crime. When a person is declared insane some burly deputy sheriff takes the man from his home by force, no matter how delicately he may have been nurtured and nourished, and he is sent to prison; in San Francisco he is taken to the Home for the Inebriates. He is then removed to the asylum in straps or a strait-jacket; maltreated at every step, and when he arrives at his destination it is impossible, on account of the crowded condition, to give him any special facilities, and he is thrown into the back yard in a condition of raving mania. In the course of a few days he will to a slight extent recover from this shock; but I cannot but believe that such treatment will intensify the insanity and decrease the number of those who will recover. Patients cannot recover with such treatment as they receive on admission to our asylums. The only true treatment of the insane is the cottage plan. This has been tried at Napa, and at a cost of perhaps $1,500 or $2,000 three or four structures have been erected that accommodate about twenty patients. I would urgently recommend Dr. Gardner's request that something like $40,000 or $50,000 be appropriated, and 50 or 100 cottages erected. There are a great many carpenters among the insane; the State owns the ground, and work can be done very cheaply; at a cost of hardly $2,000 a cottage, capable of accommodating ten patients, could be easily erected. In other words, 200 or 300 patients could be accommodated in those cottages, leaving the large building to the chronic insane; and I see no reason to believe that the percentage of cures would not be as large in this public asylum as we know it is in our private practice.

Dr. W. S. Whitwell, of San Francisco: I can cheerfully endorse the interesting paper which we have just heard, and can give my testimony as to the harm which overcrowding does to patients in a large asylum; it is a harm, I believe, not only to the acute but to the chronic cases. Dr. Gardner's suggestion of having different buildings so that patients can be properly segregated meets with my most hearty approval; I believe it would make a great difference in the number of cures, and certainly in the comfort of the patients. Dr. Gardner made a point regarding the imitative faculties of the insane, which, in my experience, I have found to be true. In the small hospital in which I treat my patients I have had constantly in mind the effect of one patient on another, and when a new patient comes I find it necessary not only to consult the comfort of the new patient, but the comfort of those that are already there, and see that the convalescing patients are not disturbed by the acute case that has just come in. I have also found one patient in company with another, and imitating that patient and going backwards, not showing the same interest in affairs, not showing the same improvement which I expected. By changing that patient into another part of the house, by giving him another nurse, by putting him with other patients in other stages of disease, I find that an improvement takes place almost immediately. I do not feel sure that the plan which Dr. Robertson mentions of having a separate hospital for the chronic insane is the best, but believe that instead of sending patients to a chronic hospital, it would be better to follow the suggestion that Dr. Gardner has put forward of smaller buildings upon the grounds. It is not necessary to keep all those patients within such buildings as the Napa and Agnews Asylums; they can be trusted about the place and put to different employments. Many of the chronic insane can be trusted to different parts of the grounds, as I believe they now are, and I think that can be carried out on a much larger scale than it is at present. The acute cases also ought to be separated into perhaps smaller buildings—you might call them a series of small institutions, perhaps connected with the central one. That has been tried in some States. I know of one in Ohio which has been carried on in that way. It has, I believe, met with great success.

Dr. A. W. Hoisholt, of Stockton: I have listened with a great deal of interest to the able paper of Dr. Gardner, and will say that the ideas therein expressed should be brought to the notice of the public through the general profession. There is one point I would like to mention, and that is the treatment of the acute—not the convalescent—insane, and where the facilities for the treatment of these cases ought to be located. Should they be connected with the asylums at Stockton, Napa and Agnews? I think neither these nor the two new asylums are located where such treatment can be carried out as it should be. I think a hospital for the treatment of the acute insane, and one with all modern equipments, should be located in or within a few miles of the city of San Francisco; in the first place, because it is the centre of population, and the majority of the acute cases could be more easily transported to the hospital; and secondly, because the aid of specialists could readily be procured for the treatment of various physical ailments which the modern idea of insanity teaches is so frequently the cause of mental ailment.

Dr. R. W. Murphy, of San Francisco, said there was one point Dr. Gardner seemed to have omitted. He had written to the author about a year ago, asking how many patients there were, not citizens of the United States, and how many Chinese were in the asylum. The speaker had received a reply, but he did not think it gave the figures. He would ask the doctor to state for the benefit of the Society the number of Chinamen confined in the asylum, and, as far as he knows, the number that are not citizens of the United States that we are paying our money for. At the time he wrote he had thought of calling the attention of the Governor to the number of insane that were taken care of who were not citizens of the United States, because he believed that it was an injustice to the taxpayers to take care of these foreigners; that it should be a legal claim made against the foreign government whose subjects we were taking care of, and he was in hopes that Dr. Gardner would present that in his report in such a manner that the Society would have taken hold of it in some way. He would like to ask what would be the figures for the three asylums—Napa, Stockton and Agnews—taking the aggregate that are not citizens of the United States?

Dr. Gardner: I am sorry I cannot give you the exact number, but I do not think I will be far from right in stating that we have between forty and fifty Chinese in the Napa asylum to-day. Outside of that nationality I do not think we have very many people who are not citizens of the United States. It was a very difficult matter to arrive at—almost as difficult as to ascertain the duration of life of the chronic insane. As for the other asylums, he had no knowledge, and could only approximate it; but his impression was that while there were, no doubt, some who were not citizens, the number, outside of Chinese, was very small.

Dr. M. Schnabel, of Newcastle, said, in view of the interesting facts presented on this subject, which really demands more attention than it has so far received, and in view of the fact of the weight that a memorial to the Legislature would have—perhaps more weight than a proposition coming in any other form—he was in favor of the President appointing a committee of five to draw up a memorial for presentation to the next Legislature, asking for such an appropriation as will be deemed necessary for the further care of the insane in the State of California.

Experimental Researches on Opacities of the Cornea after Cataract Operations.—H. L. Wagner, of San Francisco, read a paper upon this subject. Opacities following cataract extraction have been noted by many observers as occurring after the use of cocaine and sublimate, or sublimate alone. Recent observations show that cocaine renders the corneal epithelium and endothelium more permeable to certain fluids, and the subsequent use of the sublimate produces: (1) A transitory; or (2) A permanent keratitis, the former due to a distended condition of the corneal lymphatics, the latter to permanent dislocation of the corneal fibres. The effects were produced by a strong sublimate solution acting for a short period, or a weak solution acting for a long time. The speaker had verified these histological results, and wished to add some observations on the chemical physiology. In the cornea proper there are two substances: (1) Cornea-globulin. (2) Cornea-chondrin; the former being contained in the protoplasm of the lymphatic canals, the latter in the fine connective tissue fibrillæ; where the sublimate is weak or only acting for a short time, it unites with the cornea-globulin, producing an opacity that is absorbed in time. If in excess, or when its use is prolonged, a further combination with the cornea-chondrin is formed, and this can never be absorbed.

The Explosive Neuroses.—G. B. Richmond, of Salinas, read a paper upon this subject. He referred to a group of nervous diseases of which megrim and epilepsy are the type, that are either dependent upon or associated with vasomotor changes, and comprising the irregular sweatings, flushings and rigors of the surface, with particularly the sensori-motor disturbances of the heart and respiratory apparatus. Neurasthenia was a disease often overlooked or misinterpreted. Thus in his own practice his notes showed, epilepsy 22, megrim 8, and neurasthenia 31 cases; while returns from practitioners in the same field gave the due proportion of epileptics (1 in 500 inhabitants), but there was no record of neurasthenics. Lest it might be supposed that too much importance was attached to this class, he would state that while in four of his cases megrim or some other severe neurosis existed; relief was sought for the vaso-motor symptoms present. After reviewing at great length the most recent opinions of modern authorities as to the causation, immediate and exciting, of the explosive neuroses, he submitted the following propositions, based upon a study of 18 neurasthenics at the climacteric: (1) The identity of origin in the higher centres of consciousness of neurasthenia, and the allied explosives, assures a like factor in the production of their discharge. Having noticed in the treatment of the climacteric symptoms that a certain proportion were strikingly benefitted by a free administration of the bromide salts, and being imbued with the theory that these drugs corrected nerve disturbance by a sedative effect upon the afferent nerve endings, he instituted a close examination of the sexual organs, whenever feasible, in search of local sources of irritation. In 12 cases, 7 presented definite lesions in the cervix or endometrium. Of the remaining 5, 2 had deep-seated ovarian tenderness, and were directly influenced by saturation with the bromides. Of the entire 12, 9 could therefore be fairly said to furnish foci of trouble in the reproductive organs. In this, the exciting cause of these nerve explosions is presumed to be peripheral. But the predisposing cause for cell irritability is found in the lessened stability of the nerve centres, incident upon the defective innervation at the period of sexual involution in women. (2) In the functional paroxysmal neuroses, where bromide salts are markedly beneficial in removing symptoms, a reflex cause almost surely exists.

Committee on Medical and Surgical Diseases of Children.—A. H. PRATT, of Oakland, the Chairman of the committee, had selected as his subject "Points in the Differential Diagnosis of Pneumonia in Children," and proposed to discuss it only from the stand-point of the general practitioner as it was found at the bed-side. A plain case of pneumonia was very easy to diagnose, but all were not so. Some cases were so violent as almost to crush out the vitality of the subject by their onset, while others were so delayed in their development, or marked in their symptoms, that a differential diagnosis is only made with uncertainty. He would divide pneumonia into two classes, lobar- and broncho-pneumonia. While an age limit was arbitrary, clinical experience showed that the great majority of cases under three years were broncho-pneumonia. Broncho-pneumonia was usually slow in development, supervening on a bronchitis, and is the form usually following eruptive fevers. Lobar-pneumonia is more acute, attended with more violent general symptoms, and fever rising rapidly to 105° F., or more; crisis generally occurred any time after the fifth day; while in broncho-pneumonia the temperature rarely went over 103°, and was markedly remittent. The breathing in lobar-pneumonia was rapid; in broncho-pneumonia labored. Cough is usually present in the lobar variety, but always in the bronchial form, where it usually precedes the pneumonic symptoms. Pain was more apt to be present in the lobar form, and there was more general discomfort. Percussion gives more marked dulness in the lobar form, and generally at the apex; it is mostly unilateral, and may not be discoverable for three or four days after the commencement of the attack. In many cases, dulness may be found in the axilla on gentle percussion, a point he thought worth bearing in mind. In the bronchial form, percussion is more uncertain, is never pronounced, always patchy, and not clearly defined; it is usually bilateral, and most marked posteriorly. Auscultation in the lobar form may give negative results; it may show bronchial breathing, but not often; or rales, too coarse to be called subcrepitant, may be heard. If the disease starts centrally, spreading slowly, nothing may be heard for several days. In diagnosis he placed more reliance on the history and symptoms than the physical signs. If the case is acute, respiration hurried, and temperature ranging from 103° to 105°, with, by the third day, some cough, marked nervousness and general discomfort, he thought that a diagnosis of lobar-pneumonia was justified. He believed that the great majority of cases of capillary bronchitis were broncho-pneumonia, and quoted the opinions of authorities in support of this position, as well as in relation to the differential diagnosis of meningitis and pneumonia. In the absence of physical signs he knew of no better criterion than the respiration afforded.

DR. F. W. D'EVELYN, of San Francisco, thought with the exception of these cases in which the differentiation must necessarily be a fine one, that the ordinary clinical pictures presented by lobar- and broncho-pneumonia differed very markedly. If we try to remember roughly the pathology of the different diseases and the means by which breath sounds are conducted as auscultated, we shall interpret some of the more difficult problems which present themselves. In one case we have the bronchial sound interrupted, in the other we have it accentuated; and it must be remembered that the bronchial sounds are simply glottic sounds, produced by the glottis and conducted downwards and merely modified by media through which they pass to the ear of the observer, whereas the vesicular sound has a local as well as a glottic factor; that is, the local alveolar element. Now, remembering the pathology of those diseases, we note that in lobar pneumonia the vesicular element is almost entirely obliterated. It begins with fine crepitation and gradually passes away until we have nothing but the glottic sound transmitted; in other words, we have simply bronchial breathing. In a case of bronchial pneumonia we have a long persistence of the vesicular element, and it is only after collapse or atelectasis has been produced that the vesicular element entirely passes away, so that we have nothing, as the pathology will determine, but a catarrhal or moistened condition of the vesicular element, which we never find in lobar pneumonia, except towards the termination of the stage when we have redux crepitation. Then, again, the facial appearance of the patient, even before cyanosis be developed, would indicate that in one case we have an expiratory and in the other an inspiratory dyspnea. We also note, as the doctor has very properly emphasized, that the temperature curve is different in the two diseases. We find that the relation of the pulse and respiration in bronchial pneumonia varies from 1:2 to 2½. In addition to this the rhythm of respiration is entirely altered, the normal physiological pause preceding instead of following expiration. The physical signs sometimes present a difficulty. Those cases of latent pneumonia in which we have the outward indications, but which are not evident on physical examination, are very frequently of the lobar type, very rarely of the bronchial; they are simply patches of pneumonia, deep-seated, which may never reach the surface or become apparent to physical examination. We must infer their presence by the objective phenomena present. The percussion note in cases of broncho-pneumonia is of a much more tympanitic character. Even supposing we have a patch of compressed lung, or a lung of very little areation, there is more of a resonant element than in the dull, flat note of lobar pneumonia. He did not emphasize the temperature as a single factor, as he thought temperature in children was very much influenced by the individual's diathesis. Broncho-pneumonia might be said, possibly, to originate *de novo*, but clinically we generally find that it is secondary, while lobar pneumonia was a primary disease. Both the diseases, however, were very prone to be misinterpreted when we do not get a definite train of symptoms; in children the effect of chest movement, poor muscular development, lack of proper conduction of breath sounds, deficient expansion, etc., naturally complicate the diagnosis. At the same time, by carefully contrasting the respiratory rhythm, the facial appearance of the child and the relation of the vesicular to the glottic murmur, in proportion as we find the vesicular element diminished, and if this diminution is not followed by dry or fine crepitations, but by rales, then no matter what the relation of pulse, temperature and respiration, we have to deal with catarrhal or broncho-pneumonia, not with lobar.

Dr. G. B. Richmond, of Salinas, said when in children you have high and irregular temperature, you can look to the lungs for the seat of the trouble, and he could safely say that nine times out of ten, when a close pulmonary examination was made, catarrhal pneumonia would be found as the base of the trouble. He thought that nine times out of ten, in the case of children, where the symptoms are at all obscure, that a close examination will show catarrhal pneumonia.

Dr. C. H. Gibbons, of College City, said he had never yet met a case of pneumonia in a young child where the impulse was not stronger on expiration instead of on inspiration. He had come to regard this as almost diagnostic, and had never yet found it to fail.

Dr. Pratt, in replying, said he thought Dr. Richmond made a pretty liberal allowance for the diagnosis of obscure cases. He certainly did not think that he could say that nine tenths of the obscure cases of children that he was called upon to treat could be classified as belonging to catarrhal bronchitis or bronchial pneumonia.

Post-Diphtheritic Paralysis.—F. W. D'Evelyn, of San Francisco, read a paper upon post-diphtheritic paralysis, a subject which must ever prove attractive, containing, as it does, factors not merely of diagnostic and immediate prognostic value, but conditions which cannot be ignored in the deductions of final or ultimate prognosis. He questioned if we are justified clinically in considering diphtheria, or any of its so-called classical concomitants, as distinct, morbid processes, constant in their manifestations. Paralysis does not, as a general rule, make its appearance until the disease is on the wane or has passed away altogether; but this fact does not seem to warrant the conclusion, that post-diphtheritic paralysis is simply an integral and essential stage of the disease. He preferred to consider paralysis as a resultant, and not a definite phase of the primary disease. This paralysis, in the early stage, has some features which assist in its differentiation, its manifestations were discreet rather than progressive. When it simulates more profound organic lesions, its phenomena in their order of appearance are exactly reversed; *e. g.*, bulbar crises in organic lesions appear late in the attack, in diphtheria early. With the exception of palantine paralysis, the motor involvement is in excess of the sensory; in palantine both are equally intense. In recovery, however, sensation, in most cases, takes the precedence of motor improvement; and the voluntary contractions are directly proportioned to those artificial contractions produced by electrical stimuli, thus differing from the phenomena of the "reaction of degeneration." The order of the appearance of the paralytic symptoms is not always constant. In a few cases the loss of the tendon reflex, which is generally considered as the earliest symptom, is preceded by a nasal voice, with well-marked palatal involvement. In many cases we have to recognize a condition of multiple paralysis. Clinically, we should recognize two distinct stages, and the involvement of two separate tissues, nerve and muscle. The recognized fact that in many cases the sudden disappearance of the paralysis in one group of muscles to reappear in another, would scarcely admit of the conclusions that an actual alteration had been induced, either centrally or peripherally, but simply a functional perversion without any molecular or structural deviation. We have, in short, a transient cause producing a transient effect. The centric origin of the paralysis has been advanced, but that is not easily maintained, when we note that the ramifications of a nerve trunk are not equally involved, some fibres maintaining a perfect normal function; and it is difficult to conceive a lesion so selective in its action that nerve centres closely adjacent are not correspondingly affected. The peripheral degenerative changes stated to be observed in certain cases, he considered to be secondary. The second tissue to be considered is the muscle itself; its fibres are found to exhibit cloudy swelling and fatty degeneration, and, in some instances, especially when the muscle is in contact with a superimposed diphtheritic deposit, the appearance suggests a penetration of cellular elements, either leucocytes or modified blood corpuscles, forming foci capable of producing necrobiotic changes in the tissues which they evade. The more vital forms where the cardiac, or cardio-pulmonary systems become implicated he had not sufficiently investigated, but he favored the idea that this action was reflex, through the plexus of innervation. Reviewing these data he felt justified in endorsing the theory that paralytic changes are primarily due to a morbific factor—a ptomaine—generated by the specific product of diphtheria, at first instituting profound functional disturbance, which disturbance ultimately reaches a stage of independent activity, establishing a clinical line of demarcation, not demanding, prognostically or therapeutically, undue consideration of the original cause. Reaching this stage the ultimate prognosis must be based upon the actual extent of the neurotic changes, and therapeutic agents must appeal to the condition actually present. During the stage of simple functional disturbance, or ptomaine activity, we are called upon to treat the diphtheritic poison as the active cause, and in measure as we prevent tissue irritation, we reduce the tendency to secondary complications.

Dr. K. Pischl, of San Francisco, said, in regard to post-diphtheritic affections of the eye, several cases were reported of retinitis and neuritis, with deficiency of sight and contraction of the field of vision, in which the children complained of failing sight as long as two weeks after they had gone to school. Oftener he met with paralysis of the external muscles, especially of the external rectus, but the most common post-diphtheritic complication is paresis or paralysis of the ciliary muscle, impeding accommodation. The pupil is genererally not dilated, and reacts well, as the sphincter usually remains unaffected. Most of the patients who apply with diphtheritic cycloplegia are hypermetropic, because those with normal or myopic refraction are less troubled by paresis of accommodation, and do not find it necessary to seek advice. Concommitant convergent squint is sometimes developed in hypermetropic children during diphtheritic paresis owing to the increased effort of accommodation. These troubles come on in from four to six weeks after the commencement of the illness, and two to three weeks after the attack has passed by; they last from a few weeks to a few months, but finally disappear completely. It seemed to him worth mentioning that in the majority of cases seen by the oculist the attack of diphtheria had been mild; sometimes it had been described as mere sore throat, or the parents had not even called a doctor, as the children did not show alarming symptoms. Regarding therapy, he might add that we derive benefit from the application of the electric current, and that we instil eserine, and, sometimes, for temporary relief, order convex glasses.

Dr. G. B. Richmond, of Salinas, said there was one point regarding paralysis following diphtheria which was of great interest: the complete absence of the tendon reflex in cases of general paralysis. The German authorities have generally ascribed it to diphtheritic poison. In treatment the most marked results were found to follow the use of strychnine and electricity.

Dr. J. C. Sundberg, of San Francisco, said paralysis, after diphtheria, always disappears in a few weeks, without any treatment.

Dr. E. H. Woolsey, of Oakland, said where cases are prolonged there seems to be a dangerous disturbance of the spinal cord, and he had found most excellent results from the constant current; never with the downward current, but with the upward current. He had cured numbers of cases in that way beyond the question of doubt.

Committee on Surgery and Clinical Surgery.—W. Le Moyne Wills, of Los Angeles, the Chairman of this committee, read a paper on "An Experimental Study in Pneumonectomy and Lung Suture" (published at p. 235).

Dr. R. A. McLean, of San Francisco: I think the Society owes Dr. Wills a vote of thanks for this very interesting and instructive paper. It points out some facts, and gives rise to thoughts on the possibilities of surgery of the lung to be developed. It has occurred to me very often, in considering the condition of the lung, in which operative interference might be of benefit, the great danger and difficulty of reaching the lung tissue through the pleura. We have an entirely different condition of physical disposition of parts in considering the thoracic and peritoneal cavities. In the peritoneal cavity we have a lax wall which accommodates itself to the viscera. That, of course, is not so with the thorax, the ribs preventing the collapse of its walls. The lung collapses at once as soon as the pleural cavity is opened. Now, in the experience I have had in lung surgery, this has been the element of the greatest difficulty and danger. If pleurisy is set up, in the majority of cases it carries the patient off, or at least greatly prolongs the period of confinement. I have not carried out any experiments looking towards uniting the visceral with the parietal layer of the pleura, but I imagine that if it were practicable to set up a sufficient inflammatory action to unite these, the greater part of the danger in lung surgery would be removed. The number of cases of circumscribed abscess of the lung, upon which I have operated—probably congestive abscess, possibly some cases of tubercular abscess—have all done well, and have given rise to no greater reaction than the ordinary connective tissue abscess, simply because the visceral and parietal pleura had already united from inflammatory action. I would suggest, in Dr. Wills' future work, that he institute some experiments looking towards the most efficient way of securing inflammatory adhesion between the visceral and parietal layers of the pleura; for instance, the resection of one or more ribs, packing the wound with antiseptic gauze, or possibly with some escharotic, the idea being to obtain a traumatic inflammation sufficient to seal the cavity of the pleura. In that way we would have a simple surgical proposition; the substance of the lung could be opened, and experimentation carried still further after having secured this adhesion, by making various incisions into the lung itself, removing portions of the lung tissue if need be, and packing the cavity with gauze. We could then see to what extent the interference with lung tissue could be borne without danger of death or of serious symptoms supervening. With regard to the removing of any portion of the lung tissue, I have had no experience. In those cases of traumatic hernia, the force of the injury causing the wound, was sufficient to press in the ribs around the lung, so that it was protruded. The adhesion between the lung tissue and the lips of the wound was such as to seal the pleural cavity, so that when the lung was excised the pleural cavity was shut off. It seems to me this is the great problem to settle. When that is accomplished, I think lung surgery will be greatly simplified.

DR. G. F. SHIELS, of San Francisco: I think we cannot help congratulating Dr. Wills upon the efforts he has made in the direction of clearing up the subject of lung surgery. It seems to me that all through his paper he tends to agree with Dr. McLean, that the most danger in regard to this subject is the pleural cavity, just as you have the danger in abdominal surgery with the peritoneal cavity, and if I understood him correctly he thinks it is possible to suture the visceral and parietal layer of the pleura, and thus shut off the danger. His experiments have gone a long way in helping us out in a class of surgery which, as we all hope, will become more prominent in the next decade, namely, the cutting down on cavities in the lung and scraping them out and treating them on broad surgical principles.

DR. WILLS, in replying, said: I did not bring out the matter of suture of the lung sufficiently, for lack of time. I have one case that I can exhibit where suture of the lung was made primarily and secondarily, and I cut down on the adhesion and packed that wound with gauze, and the rabbit lived nine or ten days, until I was ready to kill it. In all these eight cases of lung suture to the thorax the adhesions were firm enough to have operated and done anything to the lung that remained. Also in the case of the pneumonectomies, which recovered, the attachment of the visceral pleura to the interspaces through which the lung was pulled out and clipped off was perfect. Another point that has been proven is, that the adhesion formed by the visceral pleura to the thorax did not extend beyond a reasonable limit from the wound of operation; and if the time had not been too short the operation could have been made, of resection of a V-shaped piece through the wound of adhesion formed by the pneumonectomy previously performed. I did resect rabbits in two cases, and have those specimens to exhibit. In one of them the attempted pneumonectomy was substituted by packing the chest with gauze, which remained in one case to recovery, and was gradually removed in the other. In another one where the pressure was taken off too rapidly the rabbit died. I regret not having made more in the paper of the possibility of cutting down on the lung and making it adhere to the thorax, whereby the pleura would be entirely cut off. The pleura in most of these cases outside of the point of operation was absolutely smooth, there was no pleurisy, which goes to prove that the pleura is not as sensitive in the rabbit as is ordinarily supposed; and you can pack it with gauze and pull it out and the thorax will remain smooth, and the rabbit will live very comfortably with one lung or its equivalent. The lower portion of the lung may be cut out or sutured in such a way as to render the organ of about one-half of its normal capacity. I think a great deal can be done in this line.

A Few Remarks on Head Injuries.—G. F. SHIELS, of San Francisco, read a paper on this subject, which he prefaced by reporting several cases occurring in the practice of Drs. J. F. Morse and O. G. Miller, with two that had been under his own care (*vide* MEDICAL TIMES, vol. vi, p. 162 *et seq.*). These cases seemed to emphasize the following points: After exceedingly severe injuries, with or without a short period of unconsciousness, the patient was able to walk, talk, and otherwise conduct himself so that a superficial observer would not have suspected the existence of a grave traumatic lesion. In all head injuries, the patient should be kept under observation—he would say for at least three days. Regarding treatment, there was no doubt that it was good practice to enlarge wounds, inspect the injury, elevate depressed fragments, and remove all tissues, the vitality of which is impaired. In all head injuries without a wound, and where signs of compression were present, a flap should be turned up and the skull examined for fracture. In all cases of simple fracture, unless there were absolutely no signs of compression, he would trephine, as the inner table may be much more severely injured. In bullet wounds, the opening or openings should be enlarged, and, if possible, drainage tubes introduceed. In dealing with head injuries, broad surgical principles should be applied, regardless of the importance of the contents of the skull.

A Case of Surgery of the Liver.—DUDLEY TAIT, of San Francisco, reported this case on account of the comparative rarity, or, perhaps, the want of recognition, of hydatid cysts of the convex surface of the liver in this country. A sheep-herder was admitted to the French Hospital November 16, 1890, complaining of dyspnea, a sense of tension in the right side and a severe, dry cough. Considerable distension was noticed in the right costo-diaphragmatic region, with diminished motion during respiration, there being a difference of three inches in favor of the right side; an area of well-defined dulness extended posteriorly as high as the sixth rib, laterally to the level of the fourth rib, and anteriorly obliquely downwards to the lower third of the sternum. The respiratory murmur was suppressed in an area corresponding very much to the one just described, and light friction sounds were detected in a space corresponding to right costo-diaphragmatic pleural *cul-de-sac*. A diagnosis of hydatid cyst of the convex surface of the liver was made and aspiration advised. December 24th, under antiseptic precautions, he aspirated with a Dieulafoy No. 2 needle at the sixth intercostal space, in the anterior axillary line. About five litres of a clear, transparent, non-albuminous liquid were evacuated. Scolices or hooklets were found after allowing the liquid to deposit for several hours. The patient's condition was immediately rendered much more comfortable, but on the sixth day there was a well pronounced rigor, followed by fever, with an evening exacerbation of 3° and evidences of reaccumulation of the fluid. Radical interference was clearly indicated, and on January 1, 1891, he incised the sixth intercostal space five inches in length, slightly in front of the axillary line. After resecting (subperiosteal method) two inches of the sixth and seventh ribs, the pleural cavity was opened and found to contain about two ounces of a serous liquid, in which subsequent microscopical examination showed numerous leucocytes. The lung was apparently collapsed and retracted against the vertebral column. After shutting off the pleural cavity as well as possible, by means of a large sponge, the diaphragm and the subjacent cyst were incised and three litres of pus evacuated, together with remnants of numerous daughter cysts. Gradual traction removed the cyst *en masse* without causing any hemorrhage. The cavity was finally washed out and two large drainage tubes inserted. The pleural cavity was partially occluded by approximating and suturing the costal and diaphragmatic pleural surfaces above the incision in the diaphragm. Antiseptic irrigation was resorted to daily, washing out a small quantity of pus from the hydatid and pleural cavities. The second week was marked by abundant suppuration and hyperthermia. Symptoms of septicemia developed at the end of the fourth week, and in thirteen days were followed by an abundant discharge of pus from the deepest portion of the hydatid cavity. From the end of the second month convalescence was uninterrupted and the patient could have been discharged cured but for a fistulous tract five inches in depth and ⅛ of an inch in diameter which, in spite of numerous efforts at closure, still measures 1¼ inches in depth. The author reviewed at considerable length the differential diagnosis of the disease and believed that the exploring needle should be used only as a last resort, from the danger of infecting neighboring structures. Regarding treatment, he believed in radical surgical measures, and of these that extirpation had been proved by the Australian surgeons to be superior, particularly in the class under discussion, to any other method.

A Few Surgical Reminiscences.—W. J. G. DAWSON, of St. Helena, in a paper under this title, said if the practice of castrating idiots, as suggested by a former President, ever becomes a law, the operation will necessarily be a common one, and a little personal experience with it many years ago might be of interest. In 1869, when, as an interne at Bellevue, New York, he had removed a testicle for hydrosarcocele, his assistant allowed the cord to slip from his grasp, and it retracted up the canal, to be subsequently secured with difficulty. He had been taught that there was danger of hemorrhage into the abdominal cavity from the severed cord, but an investigation in the *post-mortem* room showed that there was enough connective tissue in the canal to prevent retraction into the cavity. The author mentioned a case of fracture of the odontoid process, reported in 1869 by Dr. Bayard, of New Brunswick, in which, two years after the accident, a post-pharyngeal abscess formed, from which the separated bone was discharged, the patient recovering. In 1873 he had seen this patient exhibited before the Canadian Medical Association apparently in good health, and thought that this later report was worth mentioning owing to the rarity of the accident. In closing, he said that owing, perhaps, to the rapid strides it had made in the past few years, the tendency of the young practitioner was to devote his attention to surgery rather than medicine, and this, too, before he had become even a fair diagnostician. He recommended the coming graduate to first strive to be a physician, so that he might diagnose a pleuritic effusion with some degree of certainty before attempting aspiration. He should also be able to recognize cardiac disease, and to distinguish, at least, between aortic and mitral murmurs, before administering an anesthetic. There was too great a tendency to use the knife, and he entered a plea for conservatism even in perityphlitis, an affection which he had known to get well in many cases, under the old reliable opium treatment, that might not have survived an operation which should only be undertaken when the presence of pus was suspected.

Colles' Fracture.—E. H. WOOLSEY, of Oakland, read a paper upon this classic subject. Having mentioned the various authors who had described it since its first recognition in 1783, by Ponteau, he said its anatomical study and elucidation by Moore, of Rochester, N. Y., was most thorough and unassailable. Dr. Woolsey, in the treatment of this fracture, recommends the ordinary, Day's, posterior, pistol-shaped splint, notched at the lower border, just above the angle, so that no pressure whatever should be made against the lower end of the ulna, and a short, flexible counter splint at the front of the wrist to make counter pressure against the fractured radius, and together with necessary compression, to press and hold the lower end of the ulna backward. The splints were exhibited and their action illustrated by photographs. Anesthetics were necessary in order to make a perfect diagnosis and a perfect reduction. He mentioned Moore's directions to grasp the wrist of the patient with one hand and his hand with the other, as in "hand-shaking," making traction, abduction, bringing the hand well backward, making complete circumduction—under forced traction and extension, carrying the hand to the ulnar side and swinging it around through adduction to flexion and back again to the point of commencement. After reduction, the forearm should be placed at rest upon its ulnar border and held there during application of splints, and be maintained in this position—midway between pronation and supination—during the treatment. He insisted upon perfect immobility of the wrist and hand, except the ends of the fingers, during the entire treatment, and criticised the methods of treatment providing for passive motion of the wrist. This fracture was generally recognized as a difficult one to treat, and that it was generally followed by more or less deformity. He did not take this view of it, providing the true anatomical conditions, in any particular case, be clearly ascertained, and the methods of treatment suggested were carried out. In support of this view, he exhibited photographs of a number of cases, showing perfect restoration, as well as the original deformity before treatment. He also presented to the Society a mechanical, combination splint, consisting of a novel screw adjustment, and other adjusting devices, which make it adaptable for the treatment of all fractures of the arm and forearm, except Colles' fracture.

EVENING SESSION.

Installation of Officers.—The regular business of the Society having been concluded at the afternoon session, the only remaining business was the installation of the newly elected officers. The Society, with some members of the local profession and a few invited guests, assembled in the ball-room at B'nai B'rith Hall, and was called to order by the retiring President, DR. O. O. BURGESS, who said: My connection with this Society is drawing to a close. I am happy to say that my relations with it have been of the most pleasant character, and I wish to thank all the members for the kind indulgence and support they have given me during the session. I shall now have the pleasure of introducing Dr. W. E. Taylor, and of installing him as President of the Medical Society of the State of California. In doing this I confer upon him the highest honor that lies in the possession of the medical profession in this State, and I am sure that he will appreciate it in that sense.

Dr. W. E. Taylor, of San Francisco, said: I desire to thank you most sincerely for having selected me to preside over the deliberations of the Society for the ensuing year, and for conferring upon me, as your retiring President has said, the highest medical honor in the State of California; and when I say that, it is the highest medical honor in any State in the United States, for I believe from what I know and from what I have seen of our State Medical Society, its members, its work, and all it is now doing, I believe it stands the peer of any medical society in this broad land of ours. I feel, too, that the good work it has done in the past will be kept up and improved upon in the future. When I look back upon the long line of distinguished men who have preceded me in this Chair, I naturally feel a little timidity in accepting such a responsible position, but with your kind indulgence I hope that I shall at least not discredit your selection. We have about five hundred members—we ought to have a thousand—and there is no reason why we should not have. I think each member of this Society should use his best endeavors to bring in other members, and especially try to get in the young men, for it is to them that we must look for the future success of the Society.

FOURTH DAY—SATURDAY, APRIL 23—MORNING SESSION.

The Society was called to order by the President, O. O. Burgess, and after transacting some formal business finally adjourned to meet in San Francisco on the third Tuesday of April, 1893.

New Members.—At the different sessions the following were elected members of the Society:

Benjamin, F. W.
Carpenter, F. B.
Cheney, W. F.
Clark, B. F.
Cook, F. S.
Daywalt, G. W.
Dukeman, W. H.
Duncan, R. B.
Dunn, J. P.
Felton, L. E.
Hereford, W. S.
Jones, H. I.
Keys, E. M.
Krotoszyner, M.
Martin, W. A.
Newmark, Leo.
Perry, A. W.
Rigdon, R. L.
Sanderson, H. E.
Simpson, J. A.
Somers, G. B.
Stoneberger, A. A.
Tuggle, S. P.
Voisard, F. X.
Woodward, A. P.
Yemans, H. W.

The following were reinstated:

Coffman, N. B.
King, E. W.
Southard, W. F.

THE EXHIBITION.

The usual exhibition of drugs, surgical appliances, etc., was held in a room adjoining the main hall. The display made was smaller than for many years. The room was amply large for the purpose, but its situation was bad, and it was poorly lighted. The following firms were represented:

The Charles H. Phillips Chemical Co. (W. C. Welch, M. D., representative), had a full line of that firm's preparations, and dispensed Phillips' digestible cocoa to all who demanded a refresher.

Jno. Wyeth & Bro. (Chas. H. Robin, representative), exhibited a full line of pharmaceutical preparations.

The Doliber-Goodale Co. (Wm. Phelps, M. D., representative), exhibited "Mellin's Food," samples being given to applicants.

Tarrant & Co. (Wm. S. Wallace, M. D., representative), exhibited Tarrant's Seltzer Aperient and Hoff's Malt Extract.

Maltine Manufacturing Co. (CHAS. HEUMAN, representative), exhibited their various maltine preparations, samples of which were given, if desired.

Parke, Davis & Co.—The interests of this firm, which, on principle, refuses to exhibit at Society meetings, were looked after by W. H. DAVIS, M. D., who button-holed the doctors to talk to them of normal liquids, standardization, and the newer pharmaceutical specialties of the firm.

W. D. Allison & Co. (ALLEN D. AYRES, representative), manufacturers of operating tables and chairs, exhibited a new operating table, for which they claim many advantages over other competitors.

Clinton E. Worden & Co. (W. T. BENNETT, representative), had a full line of pharmaceutical preparations. An invitation to visit the firm's laboratory at 214 Townsend street was conspicuously displayed throughout the building. While bespeaking the most hospitable and courteous treatment for the visitor, we may add that those who stayed away missed the opportunity of seeing as perfect a manufacturing plant as is needed by the strict demands and higher standard of modern pharmacy.

Angier Chemical Co. (E. W. CLARK, M.D., representative), exhibited their preparations—Petroleum Emulsion and Fluid Glymol; also, the Glymol Atomizer. The petroleum emulsion is designed as a substitute for cod-liver oil emulsion, when used for bowel and ulcerative troubles. Fluid glymol is efficacious in nasal, throat, and local inflammations, and makes an excellent vehicle for local applications.

Cudahy Packing Co. (MISS WASHBURN, representative), showed their beef extract, "Rex" brand. This was "kept hot" and served to all who desired to taste the best extract of its kind that is in the market.

Reed & Carnrick (JNO. C. CRACKNELL, representative), occupied one end of the hall with a very extensive display of their various preparations, consisting of zymocide, cordial analeptine, lacto-cereal food, lacto-preparata and soluble food, and especially Kumyss, made from Kumyss germ or Carnrick's tablet Kumyss, which was exhibited on draught. It seemed to be fully appreciated by the physicians, and will no doubt prove a valuable invalid food.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting March 17, 1892.

The President, J. H. PARKINSON, in the Chair.

New Member.—W. B. DEJARNETTE, M. D., was duly elected a member of the Society.

Election of Officers.—This being the annual meeting the following were elected officers for the ensuing year: President, G. C. SIMMONS; Secretary and Treasurer, C. E. FOWLER; Directors, the PRESIDENT and SECRETARY-elect, W. R. CLUNESS, G. L. SIMMONS and H. L. NICHOLS.

DR. G. L. SIMMONS read a paper entitled "The Surgical Case of Robert Allen."

DR. W. R. CLUNESS said in cases of this character, where there was a known injury of the skull, trephining was indicated. In the case under consideration a correct diagnosis had been made, as was shown by the autopsy, and probably no benefit would have resulted from the operation. Quite frequently we must look to the opposite side of the brain for the seat of injury, and in cases of that kind the diagnosis was much more difficult. The speaker mentioned a case that he had operated upon several years ago. The patient had fallen from a wagon, striking on his head; the delusions following the injury were similar to those observed in Allen. The patient was trephined, a large amount of bloody serum escaped and consciousness returned; later, mania developed, and the patient was sent to Stockton, where he recovered and is now in a fair state of health.

Dr. A. E. Brune did not regard trephining as a trivial operation. He had seen cases in robust subjects that had terminated fatally. In the present case he believed an operation would have been of no benefit.

Dr. T. W. Huntington said it was seldom that we saw such a typical case of *contre-coup* as that reported this evening. The indications were not such as would call for an operation for distant injury. Extensive depression may sometimes exist without any cerebral manifestations or loss of function. He had observed this in one case of extensive injury to the skull, due to being run over by a wheel, in which there was no mental derangement.

Dr. J. R. Laine thought that in a case like the present one, occurring in an old man, the jarring of the cerebral nerves, with the rupture of some of the smaller blood vessels, would be sufficient to account for the symptoms. In young people great injury to the skull can be sustained without much apparent injury to the brain.

Dr. G. G. Tyrrell said the injury in this case was not at the site of the blow, but as a result of it. He believed that the final result of the case and the conditions found at the autopsy fully sustained Dr. Simmons in the conservative course he had taken.

Dr. F. R. Waggoner mentioned a case occurring in Nevada, which was very similar to the Allen case. The patient had delusions and exacerbations of anger, and finally, while in a fit of passion, committed a murder. He was tried and sentenced to a term in prison, but obtained a new trial and was sentenced to a short term. The loss of control over his temper was the most prominent feature.

The President said the case that had been reported this evening was a very interesting one, not only from its surgical and pathological aspects, but also from the medico-legal questions involved. The outcome of such a case might determine the fate of several other persons accused of the crime, and, virtually, there were several lives involved. The surgeon in charge had, therefore, an unusual responsibility to assume. The tendency of modern surgery was to trephine early, and it has been urged by many competent surgeons that in every case of fracture of the skull the operation should be performed at once, without waiting for symptoms. This rule was the result of that boldness which antiseptic surgery inspired, and it should certainly not be an absolute one. In the present case we had a full history and an autopsy, and the latter was most valuable evidence, as it had been made by those who were perfectly competent to recognize the pathological changes that had been reported. From this history we must conclude that no operation would have been of any service. The symptoms present were due to molecular change in the brain substance and the commencing softening opposite the point of injury was the result of *contre-coup*. Trephining would not have prevented this softening, and the operation that had been performed showed the membranes and cortex under the seat of injury to be healthy. This operation was, in its results, a very unfortunate one, as the immediate cause of death was apparently an inflammatory action set up by surgical interference.

Dr. Simmons, in replying, said he recalled a case that had been under the care of the late Dr. Hatch. A man had been injured by a block falling from the mast of a vessel. There was well marked depression, trephining was performed and a clot removed, the patient making a good recovery. The injury was almost in the same place as in Allen; and there was derangement of the intellect without perverted vision. It was not uncommon to see much more depression than was found in the Allen case, without derangement of intellect.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, March 8, 1892.

The President, D. W. Montgomery, M. D., in the Chair.

New Members.—Albert H. Taylor, M. D., Jas. A. Simpson, M. D., F. X. Voisard, M. D., and A. Stoneberger, M. D., were duly elected members of the Society.

Papular Syphilide of Integument with Miliary Gummata of Iris.—THE PRESIDENT reported a case of small and large papular syphilide of the integument, associated with miliary gummata of the iris. The patient, a German, aged 45, married, acquired, about ten months ago, a sore on the left side of the mucous surface of the prepuce, where there is still a raised, pea-sized, flat-topped papule. He denies impure connection, and is at a loss to account for the source of contagion. There is at present a copious small papular syphilide of the trunk, of the lower limbs, and a few small papules on the dorsum of the penis and on the glans penis, and a large and small papular syphilide on the upper extremities (principally on the flexor surfaces of the forearms), on the neck and on the face. He says there have been some pimples on the scalp. Many of the cutaneous lesions have a dusky, raw ham color, with glittering or slightly desquamating tops. The pimples are very numerous on the back, are grouped, but are not circinate. There are no subjective symptoms, such as itching, headache, or malaise, but there is slight soreness of the mouth; caused by mucous patches; there is one especially well marked mucous patch on the anterior surface of the soft palate. There is no sore throat. The epitrochlear, posterior cervical and inguinal lymphatic nodules are enlarged. There are three well circumscribed, miliary, yellow nodules on the pupillary margin (outer segment) of the right iris, accompanied by some injection of the neighboring blood vessels. Patient says the eye has been troubling him for the past four or five weeks. The speaker regretted that Dr. H. L. Wagner, who had charge of the lesion of the iris in this case, was not present to demonstrate the interesting disease of the eye, but it could be seen by reference to Michel's description of the syphilitic granulation tumors of the iris, that this is a classic case. Michel[1] says that syphilitic granulation tumors of the eye occur most frequently in the iris, and principally on its pupillary border or in its neighborhood. At most there are two or three round, pinhead-sized or larger, nodules, which are at first gray or reddish-yellow; later on, yellow. There is usually a good deal of congestion of the blood vessels in the vicinity. These granulomata occur very early in the course of syphilis, being frequently coincident with an early integumentary manifestation. The occurrence of gummata so early in syphilis is interesting, showing, as it does, that there is no well defined line between secondary and tertiary lesions, and that this division is principally of value to teachers, but is liable to give rise to serious error in clinical medicine. The prognosis is good as far as the iris itself is concerned. The small papular syphiloderms, however, yield but slowly to treatment, recur frequently, and at times initiate a marasmus which ends in death.[2] In this case the bad prognosis of the skin affection was, he thought, made still worse by the occurrence of precocious gummata.

DR. CHARLOTTE B. BROWN read a paper, entitled "A Year's Work at the San Francisco Children's Hospital." (*Vide* MEDICAL TIMES, vol. vi, p. 181.)

DR. F. B. CARPENTER asked how a diagnosis of pregnancy was determined in the case of atresia of the vagina?

DR. A. P. WOODWARD thought that the results of the cases of pelvic and abdominal abscess rupturing into the abdomen were very interesting, as the treatment had been so successful.

DR. DUDLEY TAIT inquired whether the microscope had been used in the diagnosis of cases of diphtheria.

DR. BROWN, in replying, said that in the case of atresia of the vagina, the diagnosis of pregnancy was made from the enlarged uterus, suppressed menstruation, and nausea. The obstruction was about half way up the vagina, and it was difficult to find the opening, but by bimanual manipulation the enlargement could be made out. In the diphtheritic cases the microscope was not used, but there was no doubt as to the diagnosis.

THE PRESIDENT said he had made examinations of the tissues of some of the patients mentioned in Dr. Brown's paper this evening. The first case reported is very interesting on account of the multiplicity of the tumors. These tumors are formed of epithelium; the outermost layer corresponds with the rete Malpighii, then, inside of that, there is a hard, dense, horny layer, and the

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[1] Lehrbuch der Augenheilkunde, von Dr. Julius Michel, p. 497.
[2] Syphilis der Haut von M. Kaposi, p. 114.

central brittle mass is made up of epithelial scales, concentrically arranged. The case reported as having cancer of the external auditory meatus, is likely to give rise to some misunderstanding. The diagnosis was never made in this case. The patient was suffering from a chronic inflammatory disease of the external auditory canal, and, as is well known, in chronic inflammatory processes, either in the skin or in the membranes, the interpapillary columns of the rete Malpighii dip down farther than usual into the subjacent tissue. This was noticed in this case, and as she was suffering from a cancer of the cervix of the uterus, it was thought she might also become similarly affected in the ear. A good many cases of multiplicity of cancer have been reported in the literature of the subject, and he had now under his charge in the San Francisco Polyclinic, a woman having a rodent ulcer of the cheek and scirrhus of the breast. The outcome of the case under discussion, shows that our fear that the disease in the ear might become cancer, has not been borne out by the clinical facts. The case of cyst in the sacral region was not lined with epithelium. therefore it cannot be called a dermoid cyst.

CALIFORNIA ACADEMY OF MEDICINE.

Regular Meeting, February 20, 1892.

The President, LUKE ROBINSON, M.D., in the Chair.

DR. A. E. REGENSBURGER read a paper on "The Electrolytic Treatment of Hirsuties." (To be published.)

DR. W. S. THORNE said he had no experience in the matter, only what he had read and just heard. He thought the points in the paper were interesting and very practical. He inquired whether there were not various agents classed as depilatories that were used more or less.

DR. B. SWAN had never used electricity for this purpose, nor seen it used. He used to assist his preceptor in removing hair with potassa fusa, his part being to neutralize the potassium with vinegar as soon as it was applied. This process left a smooth, glistening scar, but even this was better than a "mouse" on the cheek. Nitric acid was first tried, but although it made the part pretty sore, the hair came back, but white in color. The potassa fusa removed all, the follicles and skin.

DR. D. W. MONTGOMERY said it was a good plan to remove superfluous hair by means of electricity, but he never attempted it where there was a great quantity of hair, for when the hair was fairly fine, and there was a great deal of it, it was very difficult to follow each hair to its base, and they come back, or else those close to them come back and the result was bad. The best way was to tell the patient at first that the outlook was poor. He thought it a very good method of treatment where there was a nevus. He had met Dr. Hardaway at Newport, nine or ten years ago, during a meeting of the Dermatological Association, who related the case of a young man operated upon to give him a "higher forehead" and make him appear intellectual. The Doctor did not know if the good effect had lasted or not. In disinfecting the needle, he thought it was carrying things too far, for if there was any electricity used the microörganisms could not live. There was no use, as far as he could see, in disinfecting the needle.

DR. REGENSBURGER, in replying, said many of the depilatories were poisonous, some containing arsenic, and the hair always returns after their use. The caustic potash treatment mentioned by Dr. Swan was good where there are only small patches, but not where there are full beards or a great quantity of hair. He had not said the needle should be sterilized, but that it might be sterilized if wanted, as many are in the habit of doing. He had always succeeded very well, and one case where he had taken out 6,000 hairs in fifty sittings over a year ago was still all right at the present time. He said that it was a tedious procedure, and no thanks oft times. Some hairs seem to receive a stimulus from electricity, and where they were invisible before they come into sight after operation, and you get the blame of putting more hair in than you take out.

THE PRESIDENT said there was one fact mentioned in the paper, and that was the fact that we frequently find hairy or bearded women in insane asylums. He did not know if this was cause or effect. One case he had in mind was of a woman who had been treated for quite a while and her face became tattooed. After a while, about a year and a half, she jumped from a window in a fit of insanity and is now insane.

Cholecystotomy.—DR. J. F. MORSE said he had rather an interesting case lately, that of a man aged about 50, who had a marked enlargement in the region of the gall bladder. He had suffered from ten to fifteen years with gall stones and colic. The patient was operated upon and the gall bladder excised; it was enlarged, thick and inflamed, and occupied by a great number of concretions about the size of a split pea; there was also one large stone in the ductus communis. An attempt was made to push it on through into the intestine and it disappeared. The hepatic duct was also filled with concretions. There was no rise of temperature, no peritonitis; there were two free evacuations of the bowels; these were carefully washed and search made for the calculus, but it was not found. The patient finally died of hypostatic congestion in three days after the operation. On making a *post-mortem* examination the tissues about the wound were as healthy as any other operating wounds under the same conditions. The ductus communis was found to be enormously enlarged about the calibre of the small intestine, and about two or three inches long. The stone had formed a pouch at the lower end, into which it had rolled when the attempt had been made to push it on into the intestine. The duct also adhered to the stomach and had almost ulcerated through. The stone was about 1½ inches in diameter. The opening of the duct into the duodenum was very small, hardly admitting a small probe. The hepatic duct was found loaded with concretions, and this condition existed even when the duct was traced into the substance of the liver. Lawson Tait claims that he found a stone in the ductus communis and crushed it by his finger and a darning needle. Another interesting feature was the commencing ulceration of the duodenum and stomach, and probably in the course of a short while the stone would have escaped into the stomach.

DR. THORNE mentioned a case that had occurred at St. Mary's Hospital some years ago. A young woman who had resided in a malarial district came to the hospital suffering from intermittent fever; this was treated successfully. Subsequently she had attacks of jaundice, and excessive pain in the region of the liver, which radiated in all directions. The attacks occurred at intervals of one week or ten days for a space of three months, and were always accompanied by jaundice. They were treated by phosphate of soda, mineral acids, etc., but unsuccessfully. Finally an exploratory incision was made and the gall-bladder examined, but no concretions were found. There was no rise of temperature or peritonitis, and the patient died in eleven days from exhaustion. The excrements were clay-colored. The speaker recalled another case, that of an old lady whom he had treated for twelve or eighteen months. Hypodermics of morphine had to be given to relieve her. On examination a stone could be felt in the duct as large as an egg and feeling as if it were under a handerchief; as the old lady was very thin, and weighing only 75 or 80 pounds, this could easily be felt. In a few years the pain ceased, she gained 40 to 50 pounds, and the stone could never be found afterwards. He recollected a case where at the autopsy the gall-bladder did not contain any bile, but was filled with a perfect mold of white color resembling very much spermaceti.

DR. MORSE said he had once operated upon a case of caries of a rib (the seventh) and found a sac containing a gall stone about one inch in diameter.

DR. MONTGOMERY said he found, in an old syphilitic subject, the liver ulcerated, and one ulcer appeared circular; this, he thought, was a gumma, but when a section was cut and examined by the microscope it was found to be only fibrous. This circular ulcer cavity had been where a calculus had lodged, and on removing the liver it had dropped out. In reply to an inquiry he said that gall stones were generally composed of cholesterine, but occasionally some are found of inspissated bile.

DR. TOUSSIG said he had examined a few cadavers about six years ago and found that nearly all had traces of stone. Those stones analysed gave from 80 to 99 per cent. of cholesterine.

REVIEWS AND NOTICES.

Essentials of Nervous Diseases and Insanity; Their Symptoms and Treatment. A Manual for Students and Practitioners. By John C. Shaw, M. D., Clinical Professor of Diseases of the Mind and Nervous System, Long Island College Hospital Medical School; Consulting Neurologist to St. Catherine's Hospital, and Long Island College Hospital, etc. With forty-eight original illustrations Saunders' Question Compends. Philadelphia: W. B. Saunders. Price, $1.

This little book, although a compendium, is one of the best thus far issued on the subject. It is exceedingly well illustrated, there being 48 original illustrations, mostly selected from the author's private practice. The section on insanity is brief, although complete. There is appended to the description of many of the diseases a bibliography, which may be of use to the student in looking up the subjects; and as nearly all the references are to the writings of American neurologists, he will have little difficulty in so doing.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held April 5, 1892, the following physicians having complied with the law and the regulations of this Board, were unanimously granted certificates to practise medicine and surgery in this State:

Harry A. Andrews, San Francisco; Cooper Med. Coll., Cal., Dec. 4,'91.
A. A. Blondin, San Francisco; Northwestern Med. Coll., Mo., Feb. 25,'92.
Chas. W. Craven, Riverside; Miami Med. Coll., O., Mar. 1,'76.
Eugene W. Curle, Traver; Kentucky School of Med., Ky., June 30,'89.
Frank Fisher, San Francisco; Cooper Med. Coll., Cal., Dec. 4,'91.
Henry Fritcher, Los Angeles; Rush Med. Coll., Ill., Feb. 16,'75.
Richard E. Gibson, San Francisco; Cooper Med. Coll., Ill., Dec. 4,'91.
John B. Isham, Pasadena; Bellevue Hosp. Med. Coll., N. Y., Mar. 1,'73
Ancil F. Martin, Phœnix, Ariz.; Rush Med. Coll., Ill., Feb. 17,'85.
Daniel E. Osborne, Ventura; University of Michigan, June 26,'84.
William B. Payton, Perris; University of Michigan, June 30,'81.
Saml. O. L. Potter, San Francisco; Royal Coll. Phys., London, Eng., April 30,'91; Cert. Reg. Gen'l Med. Council, Gt. Britain, Sept. 3,'91.
Herman R. Prowe, Alameda; State Examination, Berlin, Germany, Jan. 31,'85.
Hilbert B. Tingley, Vina; Baltimore Univ., Md., Mar. 20,'89.
Chas. W. Townsend, Los Angeles; Coll. Phys. and Surg., N. Y., June 11,'90.

Chas. C. Wadsworth, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from March 20, 1892, to April 20, 1892.

Leave of absence for six days, to take effect about the 1st prox., is granted Lieut.-Col. Francis L. Town, Surgeon. Par. 3, S. O. 33, Dept. of California, March 30, 1892.

During the absence of Lieut.-Col. Francis L. Town, Surgeon, on leave of absence, Capt. Harry O. Perley, Assistant Surgeon, will, in addition to his duties as Post Surgeon at Fort Mason, Cal., examine recruits at the rendezvous in this city. Par. 4, S. O. 33, Dept. of California, March 30, 1892.

First Lieut. George M. Wells, Assistant Surgeon, is relieved from duty at San Carlos, Arizona, and ordered to report in person to the Commanding Officer, Fort Grant, Arizona, for duty at that station.

Capt. William H. Arthur, Assistant Surgeon, is relieved from duty at Fort Grant, Ariz., and ordered to Vancouver Barracks, Washington, for duty as Post Surgeon at that station, relieving Capt. Louis Breckemin, Assistant Surgeon. Capt. Breckemin, upon being relieved by Capt. Arthur, will return to his proper station, Presidio of San Francisco, Cal.

The resignation of First Lieut. William N. Suter, Assistant Surgeon, has been accepted by the President, to take effect July 28, 1892.

ITEMS.

Erratum.—In our issue of February, '92, on page 107, the word "Driburg," in our German correspondent's letter, was rendered "Daiburg."

Dr. A. K. Hapersberg has removed his office and residence from 935 Market street to the Hotel Melville, 1104 Market street, San Francisco.

College of Physicians and Surgeons of Chicago.—The course of study in this College now covers four years. Each year consists of a winter term of twenty-six weeks. There is also a spring term of twelve weeks, beginning at the close of the winter session, at which extra clinical and laboratory work may be done. Attendance on the spring course is optional.

Dr. W. P. Burke has removed from St. Helena to Alameda, Cal., where he has opened a sanitarium, on Railroad avenue, between Fifth and Sixth streets.